ORDER NO. MD0704014CE
A6

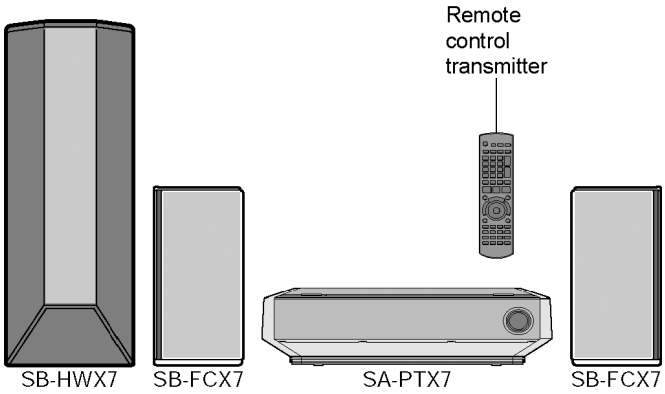
Service Manual

DVD Home Theater Sound System

SA-PTX7P

Colour

(K).....Black Type



Specifications

●GENERAL

Power Supply: AC 120 V, 60 Hz

Power Consumption: 90 W

Power Consumption in Standby Mode:

Power-Save Mode (Shipping Condition) **Approx. 0.5 W**

Dimensions (W×H×D): 360×105.5×334 mm (14-3/16”×4-3/16”×13-5/32”)

Mass: Approx. 4.7 kg (10.5 lbs)

Operating Temperature Range: +5°C to +40°C (+41°F to +104°F)

Operating Humidity Range: 10% to 80% RH (no condensation)

●AMPLIFIER SECTION

RMS TTL Power Output: 300 W

At 1 kHz and total harmonic of 10%

●Front Ch: 50 W / Channel (8 Ω)

●Center Ch: 50 W / Channel (8 Ω)

At 100 Hz and total harmonic of 10%

●Subwoofer Ch: 100 W / Channel (4 Ω)

FTC TTL Power Output: 240 W

At 120 Hz - 20 kHz and total harmonic of 1%

●Front Ch: 40 W / Channel (8 Ω)

●Center Ch: 40 W / Channel (8 Ω)

At 45 Hz - 120 Hz and total harmonic of 1%

●Subwoofer Ch: 80 W / Channel (4Ω)

●FM TUNER SECTION

Frequency range: 87.9-107.9 MHz (200-kHz step)
87.5-108.0 MHz (100-kHz step)

Antenna terminals: 75 Ω (unbalanced)

●AM TUNER SECTION:

AM Frequency range: 520-1710 kHz (10-kHz step)

●HDD SECTION:

Internal HDD Capacity: 80 GB

Recording Format: AAC/Linear PCM
MP3/WMA (LAN-PC)

Bit Rate (AAC): 128 kbps (XP)/96 kbps (SP)/ 64 kbps (LP)

Channel: 2 channels (stereo)

Recording Time:

●AAC: Approx. 2460 hours (LP mode)

●Linear PCM: Approx. 104 hours

●DIGITAL AUDIO OUTPUT:

Optical Digital Output: Optical terminal (up to 96 kHz)

●DIGITAL AUDIO INPUT:

Optical Digital Input: Optical terminal (up to 48 kHz)

●DISC SECTION

Playable discs [8 cm (3”) or 12 cm (5”)]:

Panasonic®

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(1) DVD [DVD-Video, DVD-Audio]
(2) DVD-RAM [DVD-VR, MP3 (*2, 5), JPEG (*4, 5)]
(3) DVD-R [DVD-VR, DVD-Video, MP3 (*2, 5), JPEG (*4, 5)]
(4) DVD-R DL [DVD-VR (*6), DVD-Video]
(5) DVD-RW [DVD-VR, DVD-Video, MP3 (*2, 5), JPEG (*4, 5)]
(6) +R/+RW (Video)
(7) +R DL (Video)
(8) CD, CD-R/RW [CD-DA, Video CD, SVCD (*1), MP3 (*2, 5), WMA (*3, 5), JPEG (*4, 5), HighMAT Level 2 (Audio and Image)]

*1 Conforming to IEC62107
*2 MPEG-1 Layer 3, MPEG-2 Layer 3
*3 Windows Media Audio Ver.9.0 L3
●Not compatible with Multiple Bit Rate (MBR)
*4 Exif Ver 2.1 JPEG Baseline files
●Picture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:2:2 or 4:2:0). Extremely long and slender pictures may not be displayed.
*5 The total combined maximum number of recognizable audio and picture contents and groups: 4000 audio and picture contents and 400 groups.
*6 Discs recorded on DVD recorders or DVD cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

Pick Up:

Wavelength:

●CD: 785 nm

●DVD: 662 nm

Laser power:

●CD / DVD: CLASS I / CLASS II

●VIDEO SECTION

Video System: NTSC

Video Output:

●Output level: 1 Vp-p (75 Ω)

●Output Connector: Pin jack (1 system)

Component Video Output (480p/480i):

●Y output level: 1 Vp-p (75 Ω)

●P_B output level: 0.7 Vp-p (75 Ω)

●P_R output level: 0.7 Vp-p (75 Ω)

●Output Connector: Pin jack (Y: green, P_B: blue, P_R: red) (1 system)

HDMI AV Output: HDMI 19 pin type A connector

This unit supports “HDAVI Control 2” function.

Note:

1. Specifications are subject to change without notice.
   Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

Solder:

This model uses lead free solder (PbF).

Mechanism:

This model uses DL2S (Single tray) mechanism.

System	SC-PTX7P
Main unit	SA-PTX7P

Front/Center speakers	SB-FCX7P *1
Subwoofer	SB-HWX7P *2

Refer to the respective original service manuals for *1, *2.

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WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

HIGH MAT AUDIO•IMAGE

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iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

Made for iPod

■ **Built-in decoders**
You can play discs with these symbols.

DOLBY DIGITAL PRO LOGIC II

dts Digital Surround

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

Page

1 Safety Precautions 5
1.1. GENERAL GUIDELINES 5
1.2. Before Repair and Adjustment 5
1.3. Protection Circuitry 6
1.4. Safety Parts Information 6
2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices 8
3 Precaution of Laser Diode 9
4 About Lead Free Solder (PbF) 10
4.1. Service caution based on legal restrictions 10
5 Handling Precautions for Traverse Unit 11
5.1. Cautions to Be Taken in Handling the Optical Pickup Unit 11
5.2. Grounding for electrostatic breakdown prevention 11
6 HDD (Hard Disk Drive) Handling Care 13
7 Accessories 14
8 Operation Procedures 15
8.1. Remote Control Key Buttons Operations 15
8.2. Main Unit Key Buttons Operations 16
8.3. Using the EZ Sync HDAVI Control 17
8.4. Using the XM® Satellite Radio 19
8.5. Using the Music Port 20
8.6. Using the iPod 21
8.7. Wireless Surround 22
8.8. Disc Information 31
9 New Features 33
9.1. As a Music Jukebox (Using HDD) 33
9.2. Easy Location of HDD Recording Contents 39
9.3. Network Connections (LAN) 41
9.4. Operating iPod with this Unit 47
10 Self-Diagnosis and Special Mode Setting 49
10.1. Service Mode Summary Table 49
10.2. Service Mode Table (Main Unit) 49
10.3. DVD Self Diagnostic Function-Error Code 58
10.4. Sales Demonstration Lock Function 62
10.5. Service Precautions 63
11 Assembling and Disassembling 64
11.1. Disassembly Flow Chart 65
11.2. Main Components and P.C.B. Locations 66
11.3. Disassembly of Top Cover Assembly 67
11.4. Disassembly of Top Shield 67
11.5. Disassembly of Front Panel 67

Page

11.6. Disassembly of Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B. 67
11.7. Dissassembly of Main P.C.B. 68
11.8. Disassembly of XM Module P.C.B. 70
11.9. Disassembly of Power P.C.B. 70
11.10. Replacement of Regulator IC (IC725) 71
11.11. Replacement of Regulator Diode (D725/D758) 71
11.12. Disassembly of Regulator P.C.B. 72
11.13. Disassembly of DVD Module P.C.B 72
11.14. Disassembly of Wireless Adapter P.C.B. 73
11.15. Disassembly of Audio P.C.B. 74
11.16. Replacement of Digital Amp IC (IC102) 74
11.17. Replacement of Regulator Transistor (Q113) 75
11.18. Disassembly of DVD Mechanism Unit 75
11.19. Disassembly of Relay P.C.B. 76
11.20. Disassembly of Rear Panel 76
11.21. Disassembly of D-Port P.C.B. 78
11.22. Disassembly of Digital P.C.B. 78
11.23. Disassembly of AC-Inlet P.C.B. 80
11.24. Disassembly of Hard Disk Drive (HDD) 80
12 Assembly and disassembly of DVD Mechanism Unit 81
12.1. Disassembly Procedure 81
13 Service Fixture and Tools 86
14 Service Positions 86
14.1. Checking & Repairing Main P.C.B. 86
14.2. Checking & Repairing XM Module P.C.B. 87
14.3. Checking & Repairing DVD Module P.C.B. 87
14.4. Checking & Repairing Audio P.C.B. 88
14.5. Checking & Repairing Regulator P.C.B. 89
14.6. Checking & Repairing Power P.C.B. 89
14.7. Checking & Repairing Panel P.C.B. 90
14.8. Checking & Repairing Digital P.C.B. 91
14.9. Checking & Repairing AC-Inlet P.C.B. 93
15 Measurements and Adjustments 95
15.1. Service Tools and Equipment 95
15.2. Important points in adjustment 95
15.3. Storing and handling of test discs 95
15.4. Optical adjustment 96
16 Abbreviations 98
17 Voltage and Waveform Chart 100
17.1. DVD Module P.C.B. 100
17.2. Digital P.C.B. 103
17.3. Tray Loading, XM Module, Panel, & Tact-2 P.C.B. 105

17.4. Main P.C.B. ---- 106
17.5. AC-Inlet, Power & Regulator P.C.B. ---- 108
17.6. Audio (D-Amp) P.C.B. ---- 109
17.7. Audio (DSP) P.C.B. ---- 110
17.8. Waveform Chart ---- 112
18 Illustration of IC's, Transistors and Diodes ---- 115
19 Wiring Connection Diagram ---- 117
20 Block Diagram ---- 119
20.1. System Control ---- 119
20.2. DVD (Servo) ---- 120
20.3. DVD (Audio) ---- 121
20.4. DVD (Video) ---- 122
20.5. DVD (Interface) ---- 123
20.6. AUDIO SELECTOR ---- 124
20.7. AUDIO (DSP) ---- 125
20.8. AUDIO DiGITAL AMP ---- 126
20.9. DIGITAL 1 ---- 127
20.10. DIGITAL 2 ---- 128
20.11. POWER ---- 129
21 Schematic Diagram Notes ---- 131
22 Schematic Diagram ---- 133
22.1. DVD Module (DV5/HDMI/FPGA/VIDEO DAC) Circuit ---- 133
22.2. Digital & XM Module Circuit ---- 141
22.3. Main, D-Port & Panel Circuit ---- 148
22.4. Power, Audio (DSP/D-Amp), AC-Inlet & Regulator Circuit ---- 153
22.5. Tact-1, Tact-2, Wireless Adapter, Relay, Tray Loading & Optical Pickup Unit Circuit ---- 161
23 Printed Circuit Board ---- 163
23.1. DVD Module P.C.B. ---- 163
23.2. Digital P.C.B. ---- 164
23.3. XM, D-Port, Tact-1 & Tact -2 P.C.B. ---- 165
23.4. Main P.C.B. ---- 166
23.5. Panel & Wireless Adapter P.C.B. ---- 168
23.6. Power P.C.B. ---- 169
23.7. Audio (D-Amp/DSP) P.C.B. ---- 170
23.8. AC-Inlet, Regulator, Relay & Tray Loading P.C.B. ---- 171
24 Basic Troubleshooting Guide ---- 173
24.1. Before Repairing ---- 173
24.2. Precaution of Replacement of HDD (Hardisk) ---- 173
24.3. Precaution of Repairing Digital P.C.B. ---- 173
24.4. Troubleshooting Flowchart of HDD Unit, CD Drive Unit & Main Micron (IC1502) ---- 174
25 Terminal Function of ICs ---- 175
25.1. IC501 (RFKWERE006PA): IC System Control ---- 175
25.2. IC800 (C0HBB0000057): IC FL Display Driver ---- 176
25.3. IC1101 (C1CB00002054): IC LAN (Ethermet Controller) ---- 176
25.4. IC1200 (C1DB00001549): IC Link/Transaction Controller ---- 177
25.5. IC1502 (C2GBC0000300): IC Microcomputer ---- 178
25.6. IC1800 (MN677382FV): IC Sub Microprocessor ---- 180
25.7. IC3201 (C1AB00002259): IC Video Encoder ---- 181
26 Exploded Views ---- 183
26.1. Cabinet Parts Location ---- 185
26.2. Packaging ---- 189
27 Replacement Parts List ---- 190
27.1. Component Parts List ---- 191
28 Schematic Diagram for printing with letter size ---- 214

1 Safety Precautions

1.1. GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, carry out the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15µF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in **Figure 1**.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

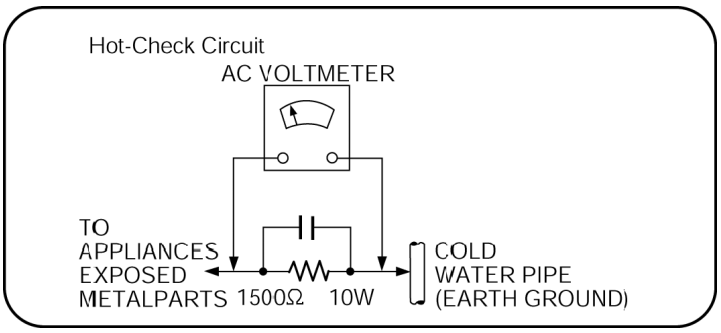


Figure 1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such C701, C702, C703, C704, C705, C706, C707, C748 through a 10 Ω, 10 W resistor to ground.

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 120 V, 60 Hz in NO SIGNAL mode volume minimal should be ~ 500 mA.

1.2.1. Caution for fuse replacement

(For English)
CAUTION:

Replace with the same type fuse:
(Manufacturer: HOLLYLAND, INC, Type: 51MS, F701, 4A, 125V)

(For Canadian French)
ATTENTION:

Utiliser un fusible de rechange de mme type:
(Manufacturer: HOLLYLAND, INC, Type: 51MS, F701, 4A, 125V)

1.3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

1.4. Safety Parts Information

Safety Parts List:

There are special components used in this equipment which are important for safety.
These parts are marked by ⚠ in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Table 1

Reference No.	Part No.	Part Name & Description	Remarks
340	RAE2025Z-S	TRAVERSE UNIT	[M] ⚠
PC701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC721	B3PBA0000402	PHOTO COUPLER	[M] ⚠
TH701	D4CAA5R10001	THERMISTOR	[M] ⚠
TH721	D4CAA5R10001	THERMISTOR	[M] ⚠
L701	ELF15N035AN	LINE FILTER	[M] ⚠
L702	ELF19H015A	CHOKE COIL	[M] ⚠
LB102	J0JKB0000020	EMI BEAD CORE	[M] ⚠
LB103	J0JKB0000020	EMI BEAD CORE	[M] ⚠
LB507	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB509	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB510	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB8701	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
T701	ETS19AB221AG	TRANSFORMER	[M] ⚠
T721	ETS35BC2HGAD	TRANSFORMER	[M] ⚠
T722	G4D1A0000117	SWITCHING TRANSFORMER	[M] ⚠
Z701	ERZV10D471CS	ZENER	[M] ⚠
RY701	K6B1AEA00015	POWER RELAY	[M] ⚠
F701	K5D402AQ0002	FUSE 4A	[M] ⚠
IP701	K5H302100004	FUSE PROTECTOR	[M] ⚠
IP702	K5H2022A0011	FUSE PROTECTOR	[M] ⚠
IP703	K5H302100004	FUSE PROTECTOR	[M] ⚠
IP722	K5H7512A0010	FUSE PROTECTOR	[M] ⚠
P701	K2AB2B000007	JACK AC INLET	[M] ⚠
A2	K2CB2CB00018	AC CORD	[M] ⚠
C701	F1BAF471A013	470P	[M] ⚠

Reference No.	Part No.	Part Name & Description	Remarks
C702	F1BAF471A013	470P	[M] ⚠
C703	ECQU2A104MLC	0.1µF	[M] ⚠
C704	ECQU2A104MLC	0.1µF	[M] ⚠
C705	F1BAF1020020	1000P	[M] ⚠
C706	F1BAF1020020	1000P	[M] ⚠
C707	F1BAF1020020	1000P	[M] ⚠
C748	F1BAF471A013	470P	[M] ⚠

2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution:

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

3 Precaution of Laser Diode

CAUTION:

This unit utilizes a Class I (CD) / Class II (DVD) laser.

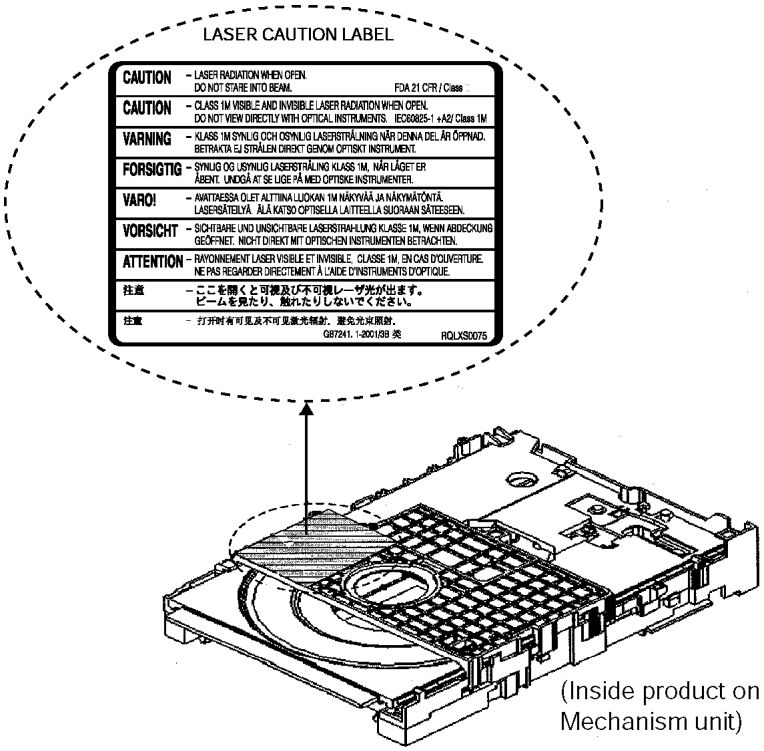
Invisible laser radiation is emitted from the optical pickup lens.

Wavelength: 662nm (DVD) / 785nm (CD).

Maximum output radiation power from pickup: 100µW/VDE

When the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.


LASER CAUTION LABEL
CAUTION – LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR / Class
CAUTION – CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A2/ Class 1M
VARNING – KLASS 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.
FORSIGTIG – SYNLIG OG USYNLIG LASERSTRÅLING KLASS 1M, NÅR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.
VARO! – AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYVÄÄ JA NÄKYMÄTÖNTÄ LASERSÄTEILYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAAN SÄTEESEEN.
VORSICHT – SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 1M, WENN ABDECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.
ATTENTION – RAYONNEMENT LASER VISIBLE ET INVISIBLE. CLASSE 1M, EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D'OPTIQUE.
注意 – ここを開くと可視及び不可視レーザ光が出ます。ビームを見たり、触れたりしないでください。
注意 – 打开时有可见及不可见激光辐射，避免光束照射。
GB7241. 1-2001/98 类
RQLXS0075
(Inside product on Mechanism unit)

CAUTION:
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

4 About Lead Free Solder (PbF)

4.1. Service caution based on legal restrictions

4.1.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of “PbF” is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
  (Definition: The letter of “PbF” is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
  RFKZ03D01K----------(0.3mm 100g Reel)
  RFKZ06D01K----------(0.6mm 100g Reel)
  RFKZ10D01K----------(1.0mm 100g Reel)

Note

* Ingredient: tin (Sn), 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

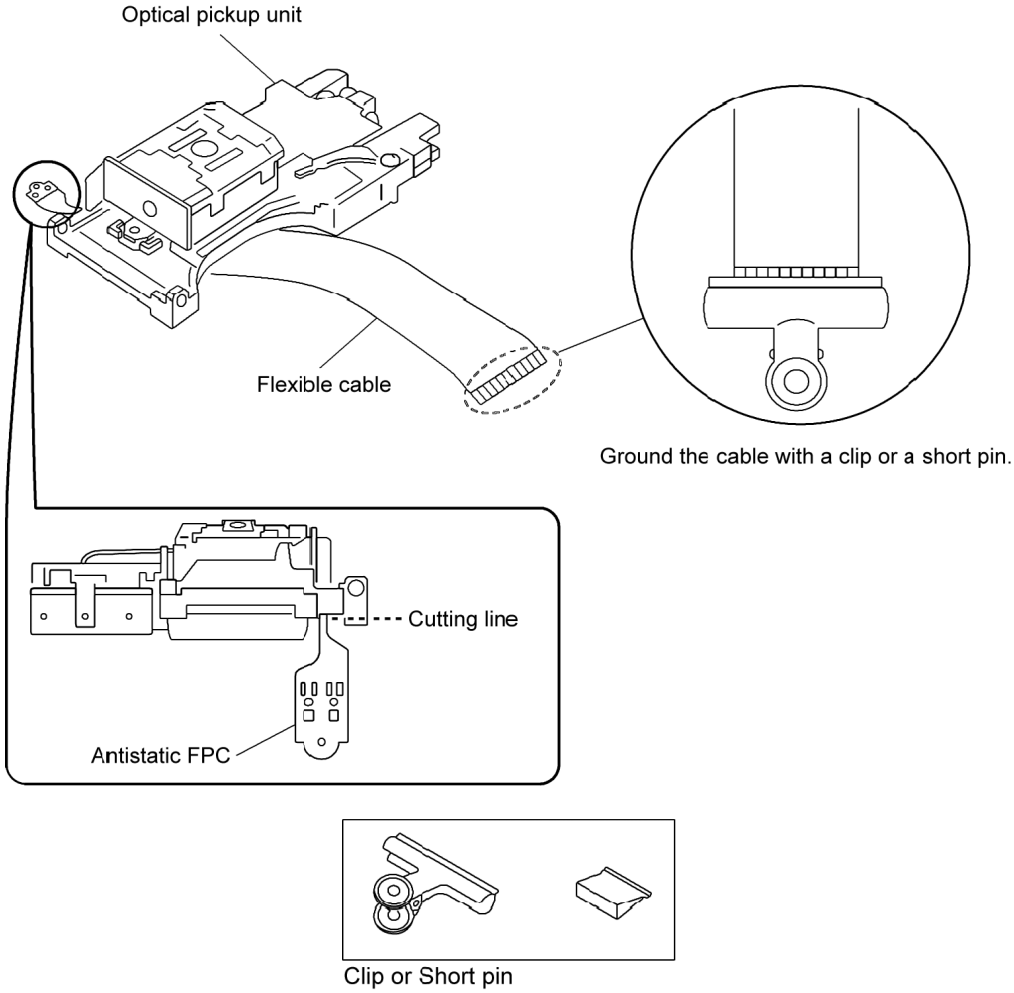
5 Handling Precautions for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode.

5.1. Cautions to Be Taken in Handling the Optical Pickup Unit

The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FPC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FPC.



5.2. Grounding for electrostatic breakdown prevention

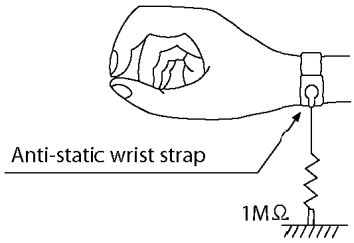
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

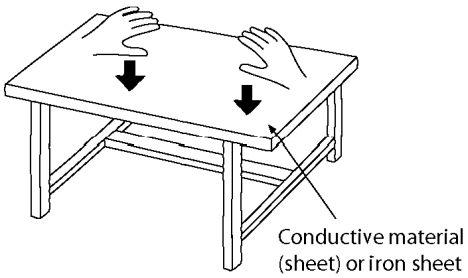
5.2.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

5.2.2. Human body grounding

1. Use the anti-static wrist strap to discharge the static electricity form your body.


Anti-static wrist strap
1MΩ


Conductive material
(sheet) or iron sheet

6 HDD (Hard Disk Drive) Handling Care

The HDD is a high precision recording instrument and because of its long recording capability and high speed operation it is a very special device that is easily susceptible to damage.

■ *The HDD is a device that is not built to withstand vibration/shock or dust*

Depending on the setup environment and handling of the HDD some content may become damaged and play and recording may no longer be possible. Especially during operation, do not subject the unit to any vibration, shock, or remove the AC power plug from the household AC outlet. In the event of a power failure during recording or play, the content may be damaged.

■ *Back up the HDD periodically*

As a precaution for HDD failure, we recommend making a backup of the HDD periodically. However, in some cases where the HDD is heavily damaged, backups may not be restored.

■ *Immediately request service as soon as you feel there may be a problem with the HDD*

If there is an irregularity within the HDD, repetitive strange sounds or distortion ("broken up" audio) may result. Using the HDD in this condition may worsen the problem and in the worst case the HDD may no longer become usable. As soon as you notice this type of problem, request service. Recorded content (data) on an HDD that has become unusable is unrecoverable.

■ *Setup precautions*

- **Do not place in an enclosed area where the rear cooling fan is covered up.**
- **Place the unit on a surface that is flat and not subject to vibration or impact.**
- **Do not place on anything that generates heat like a video cassette recorder, etc.**

- Do not place in an area often subject to temperature changes.
- Place in an area where condensation does not occur. Condensation is a phenomenon where moisture forms on a cold surface when there is an extreme change in temperature. Condensation may cause internal damage to the unit.
- **Conditions where condensation may occur**
  - When there is an extreme change in temperature (moving from a very hot location to a very cold location, or vice versa, or when subjected to an air conditioner or when cooled air directly impacts the unit.) When the HDD (warms during operation) is subjected to cold air, condensation may form on the inside of the HDD and may cause damage to the HDD heads, etc.
  - When there is high humidity or a lot of steam in the room.
  - During the rainy season.

In the above situation, without turning the unit on, let the unit adjust to the room temperature and wait 2 3 hours until condensation is gone.

■ *Cigarette smoke,etc. causes malfunction or breakdown*

The unit may breakdown if cigarette smoke or bug spray/ vapor, etc. gets inside the unit.

■ *While operating*

- Do not move the unit or subject to vibration or impact. (The HDD may become damaged.)
- Do not remove the AC power plug from the household AC outlet, or flip the power breaker switch.

While the unit is on, the HDD is rotating at high speed. Sound or movement due to rotation is normal.

■ *When moving the unit*

1. Remove the CD.
2. Turn the unit off.
3. After "GOOD-BYE" is finished displaying, remove the plug from the wall within 2 minutes, or wait until conversion and analysis is complete to remove the AC power supply cord from the household AC outlet.
4. Once the HDD is no longer rotating and has come to a complete stop (after waiting about 2 minutes), move the unit carefully so as to avoid any vibration or shock. (After the power has been turned off, the HDD will briefly continue to rotate due to inertia.)

After the power to the unit has been turned off, (unit enters "Standby Mode"), if there are recorded tracks that have not yet been converted or analyzed, the HDD will begin conversion and analysis of these recorded tracks after about 2 minutes.

During conversion/analysis:

- Do not remove the AC power supply cord.
- If you are using an extension cord and/or power strip with a power switch, do not switch the power to off.

■ *Indemnity concerning recorded content*

Panasonic does not accept any responsibility for damages directly or indirectly due to any type of problems that result in loss of recording or edited content (data), and does not guarantee any content if recording or editing does not work properly. Likewise, the above also applies in a case where any type of repair is made to the unit (including any other non-HDD related component).

■ *A warning about data management:*

This unit records the history of your operations (user information), and this history includes data such as track data recorded, user playlist information, and the various settings you made on this unit. Depending on where you place this unit, your personal information could be compromised and used by a third party. Use caution and discretion when considering where to use this unit.

Also note that if this unit is sent for repair, user information may be checked as well.

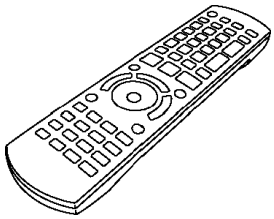
To prevent compromising your personal information, please delete or change all personal user information before sending in for repair.

■ *Cautions about disposal or transferring ownership of this unit*

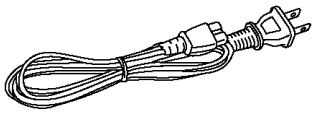
Before disposing or transferring ownership of this unit, delete all recorded data and user playlist information (➜ page 94 of operating instruction, Delete All Tracks in the Music Collection). Furthermore, change any settings as necessary.

In the event that user information is changed, lost, misused, compromised, or any damage or loss occurs as a result, Panasonic will not accept any responsibility. Please be aware of this before using this unit.

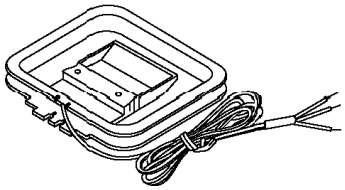
7 Accessories



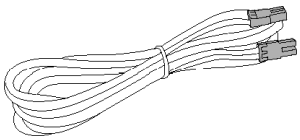
Remote control



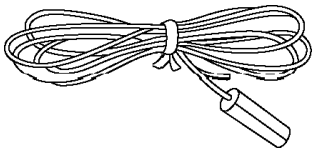
AC cord



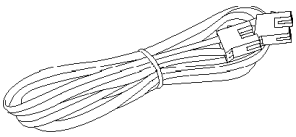
AM loop antenna



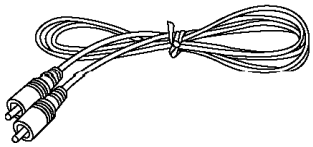
Speaker cable (4M)



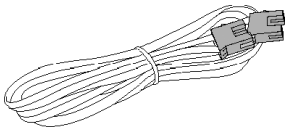
FM antenna



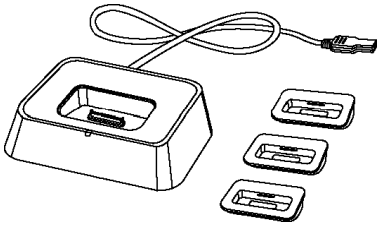
Speaker cord (4M/White)



Video Cable



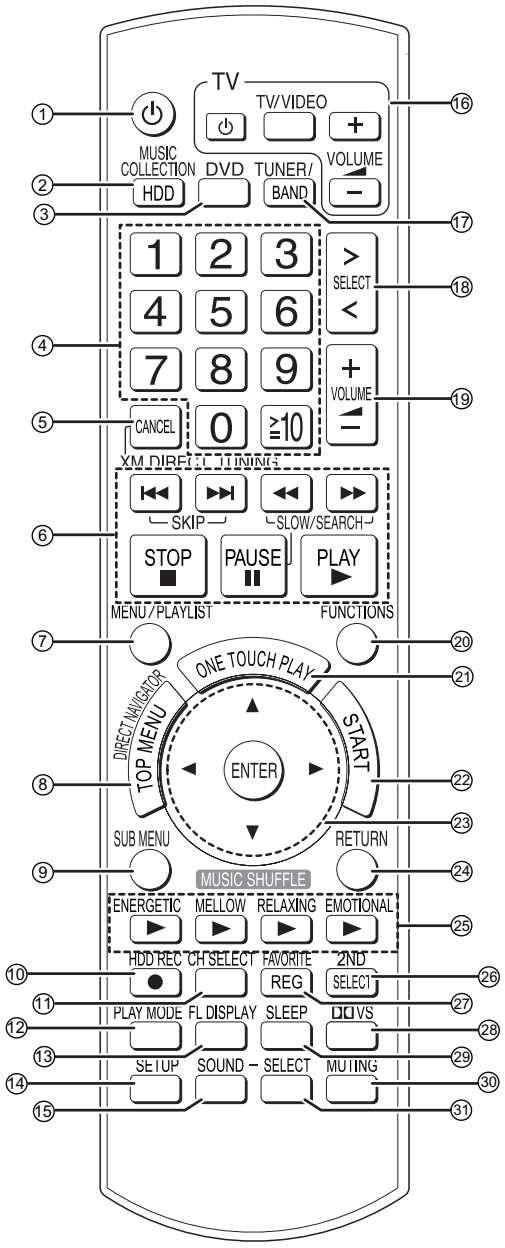
Speaker cord (4M/Red)



iPod dock

8 Operation Procedures

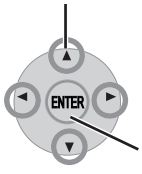
8.1. Remote Control Key Buttons Operations



① Turn the unit on (OI page 14)
② Select the HDD drive (OI page 45)
③ Select the DVD/CD drive
④ Select channels and title numbers, etc./Enter numbers
⑤ Cancel items
Start XM direct tuning (OI page 65)
⑥ Basic operations for playback (OI page 45, 50, 52)
⑦ Show a disc menu or playlist (OI page 36, 51)
⑧ Show a disc top menu or program list (OI page 50, 51)
⑨ Show sub menu
⑩ Start recording to HDD (OI page 34)
⑪ Select speaker channels (OI page 82)
⑫ Select play mode (OI page 54, 57)
Change radio reception mode (OI page 62)
⑬ Switch information on the main unit's display
– When the selector is set to "DVD/CD", elapsed time, track number information, etc. can be switched depending on what is being played.
– When the selector is set to "XM" (OI page 66)
⑭ Show Setup menu (OI page 14, 91)
⑮ Select the sound effect to set (OI page 82)
⑯ Television operations
⑰ Select the source FM/AM/XM
⑱ Select the source
Music Collection → DVD/CD → FM → AM → XM
OPTION → MUSIC PORT → AUX → TV Audio
⑲ Adjust the volume
⑳ Show FUNCTIONS window
㉑ Start up and play a disc automatically/control both the home theater system and the television (OI page 76)
㉒ Show Start menu (OI page 30)
㉓ Selection/enter, frame-by-frame (OI page 50)
㉔ Return to previous screen
㉕ Music shuffle (OI page 49)
㉖ Show the menu for Multiroom function (OI page 81)
㉗ Register the current track to Favorites (OI page 70)
㉘ Turn Dolby Virtual Speaker on/off (OI page 83)
㉙ Set SLEEP timer (OI page 86)
㉚ Mute the sound (OI page 86)
㉛ Set the sound effect (OI page 82)

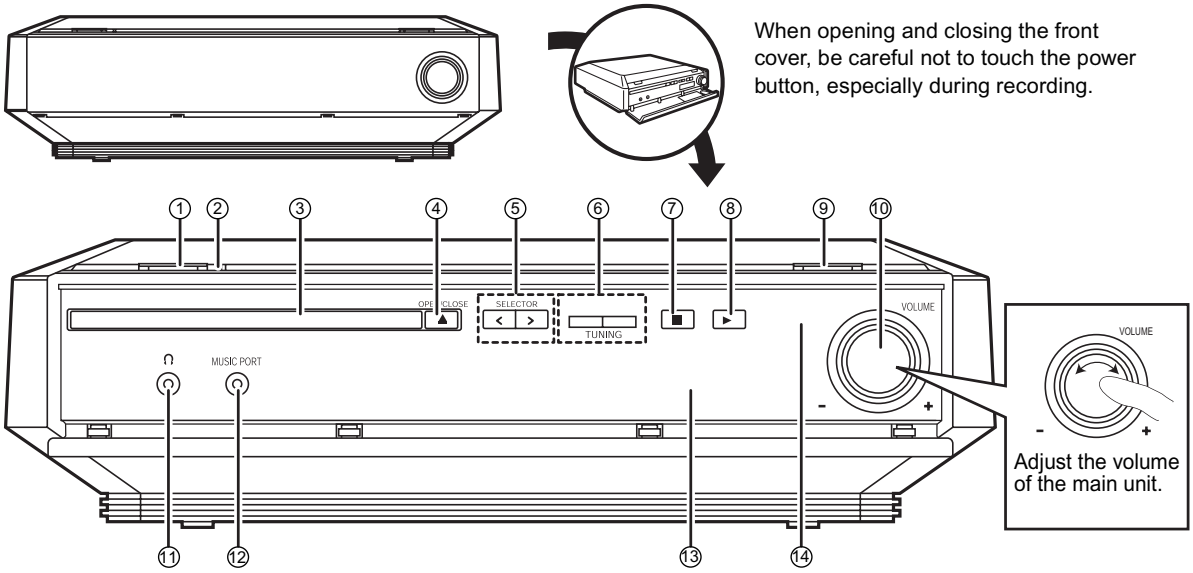
■ *Using the cursor*

- **Select items on menu screens and set items.**
Press up, down, left, or right to select an item.
You can also move frame-by-frame (backward/forward).
While paused, press [◄] or [►] (left/right).



Press [ENTER] to confirm.

8.2. Main Unit Key Buttons Operations


When opening and closing the front cover, be careful not to touch the power button, especially during recording.
1 2 3 4 5 6 7 8 9 10
OPEN/CLOSE
SELECTOR
TUNING
VOLUME
MUSIC PORT
11 12 13 14
VOLUME
Adjust the volume of the main unit.

① **POWER button (POWER ⏻/I) (OI page 14)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

② **Standby/on indicator**
When the unit is connected to the AC power supply, this indicator lights up in standby mode and goes out when the unit is turned on.

③ Disc tray

④ Open/close disc tray (OI page 29)

⑤ Select the source

Music Collection → DVD/CD → FM → AM → XM
↑ ↓
OPTION ← MUSIC PORT ← AUX ← TV Audio

⑥ Skip, Select preset radio stations/channels

⑦ Stop playback (OI page 45, 50, 52)

⑧ Start playback (OI page 45, 50, 52)

⑨ Start recording to HDD (OI page 34)

⑩ Adjust the volume

⑪ Connector for headphones (OI page 86)

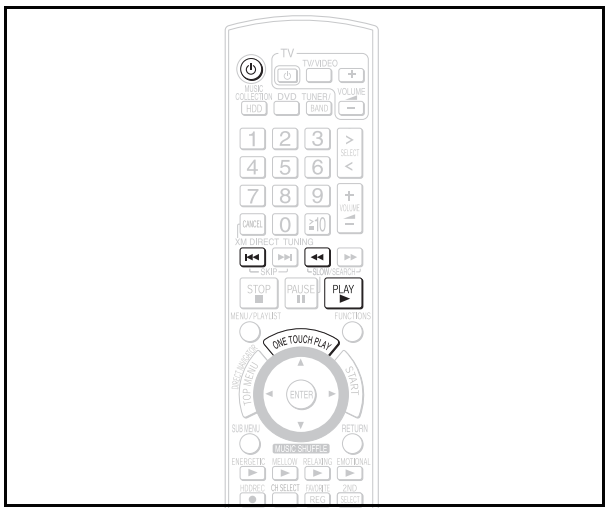
⑫ Connector for external device (OI page 86)

⑬ Display (OI page 29)

⑭ Remote control signal sensor

Rear panel terminals (OI page 12–13, 17–20)

8.3. Using the EZ Sync HDAVI Control

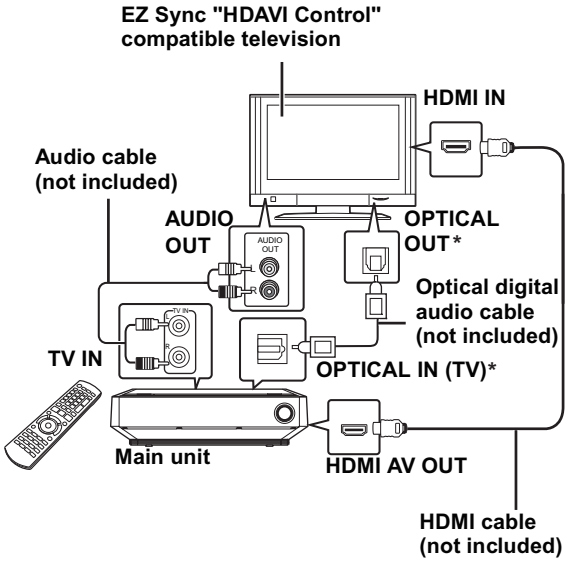


EZ Sync "HDAVI Control"

EZ Sync "HDAVI Control" is a convenient function that offers linked operation of this unit, and a Panasonic TV (VIERA) under "HDAVI Control".
You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment for operational details.

- EZ Sync "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.
- This unit supports "HDAVI Control 2" function. The TV with "HDAVI Control 2" function enables the following operation: EZ Sync Control only with TV s remote control (for "HDAVI Control 2") (OI page 77).

  "HDAVI Control 2" is the newest standard (current as of February, 2007) for Panasonic s HDAVI Control compatible equipment. This standard is compatible with Panasonic's conventional HDAVI equipment.



* Connect this when you want to output TV audio from this unit's speakers as digital audio.

Preparation

1. Confirm that the HDMI connection (OI page 17) has been made.
2. Set "EZ Sync" to "On" (OI page 93, HDMI menu).
3. To complete and activate the connection correctly, turn on all EZ Sync "HDAVI Control" compatible equipment and set the television to the corresponding HDMI input mode for this unit.

Whenever the connection or settings are changed, reconfirm the points above.

- **It is recommended that you use Panasonic s HDMI cable.**
  Recommended part number:
  RP-CDHG15 (1.5 m/4.9 ft.), RP-CDHG30 (3.0 m/9.8 ft.), RP-CDHG50 (5.0 m/16.4 ft.), etc.
- **Non-HDMI-compliant cables cannot be utilized.**

Functions made possible with EZ Sync "HDAVI Control" are...

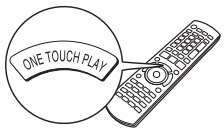
■ *One-touch theater playback*

You can turn on this unit and television, and start playing the disc with a single press of a button.

- This operation is for "DVD/CD" only.

Press [ONE TOUCH PLAY].

- This function also works if you press [▶] (PLAY) on this unit's remote control when this unit is in standby mode.



[Note]

Playback may not be immediately displayed on the television. If you miss the beginning portion of playback, press [⏮] or [◀◀] to go back to where playback started.

■ *Power on link*

The television automatically turns on and the corresponding display appears when the following operations are performed with the television in standby mode. Audio output is also automatically switched to this unit's speakers.

- When you start playback on this unit.
- When using the GUI (display screen) to perform an action. [e.g., Start menu screen (IO page 30)]

■ *Power off link*

When the television is turned off, this unit goes into standby mode automatically.

- This function works only when "Music Collection", "DVD/CD" or "TV Audio" is selected as the source on this unit.
- When the television is turned on, this unit does not turn on automatically.

[Note]

Only this unit turns off when you press [⏻] for shutting it down. Other connected equipment compatible with EZ Sync "HDAVI Control" stays on.

■ *Auto input switching*

- When you switch the television input to TV tuner mode, this unit will automatically switch to "TV Audio*".
  - * If you want to output digital audio, connect the optical cable (OI page 76) and select "DIGITAL IN" in "TV Audio Input" menu (OI page 94).
- When you start playback on this unit, the television will automatically switch to the HDMI input mode for this unit.
- Also from the Start menu, the input mode will be switched.

■ *Speaker control*

You can select whether audio is output from this unit or the television speakers by using the television menu settings. For details, refer to the operating instructions of your television.

Home theater

Theater speakers are active.

- When this unit is in standby mode, changing the television speakers to theater speakers in the television menu will automatically turn this unit on and select TV Audio* as the source.
  - * If you want to output digital audio, connect the optical cable (OI page 76) and select "DIGITAL IN" in "TV Audio Input" menu (OI page 94).
- The television speakers are automatically muted.
- You can control the volume setting using the volume or mute button on the TV s remote control. (The volume level is displayed on this unit's FL display.)
- To cancel muting, you can also use this unit's remote control (OI page 22).
- If you turn off this unit, television speakers will be automatically activated.

TV

Television speakers are active.

- The volume of this unit is set to "0".
  - – This function works only when "DVD/CD" or "TV Audio" is selected as the source on this unit.
- Audio output is 2-channel audio.
- Audio from the CD is not output from the television speakers while recording to the HDD. However, if "Listening while Recording" is selected, audio will be output from this unit's speakers. In this case, operate the volume settings with this unit s remote control.

[Note]

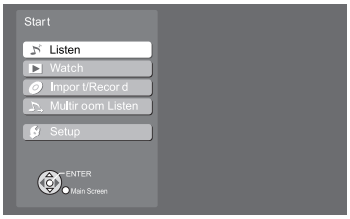
Depending on the type of TV, the TV settings, or operations performed on the TV, Speaker Control may be automatically set to "Home theater".

■ *EZ Sync Control only with TV's remote control (for "HDAVI Control 2")*

You can control the disc menus of this unit with the TV's remote control when using the "Music Collection", "DVD/CD", "FM", "AM" and "XM" source. When operating the TV's remote control, refer to the illustration below for operation buttons.

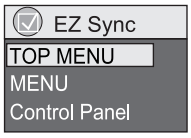
1 Select the operation menu by using the television menu settings. (For details, refer to the operating instructions of your television.)

2 Select the desired item on the Start menu (OI page 30).



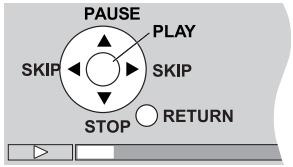
If you select "Disc" in "Listen" or "Watch" on the Start menu

"EZ Sync" menu is displayed. Select the desired item.



- **"TOP MENU":** Shows a disc top menu (OI page 50) or program list (OI page 51).
- **"MENU":** Shows a disc menu (OI page 52) or playlist (OI page 51).
- **"Control Panel":** The basic operations for playback discs are available.

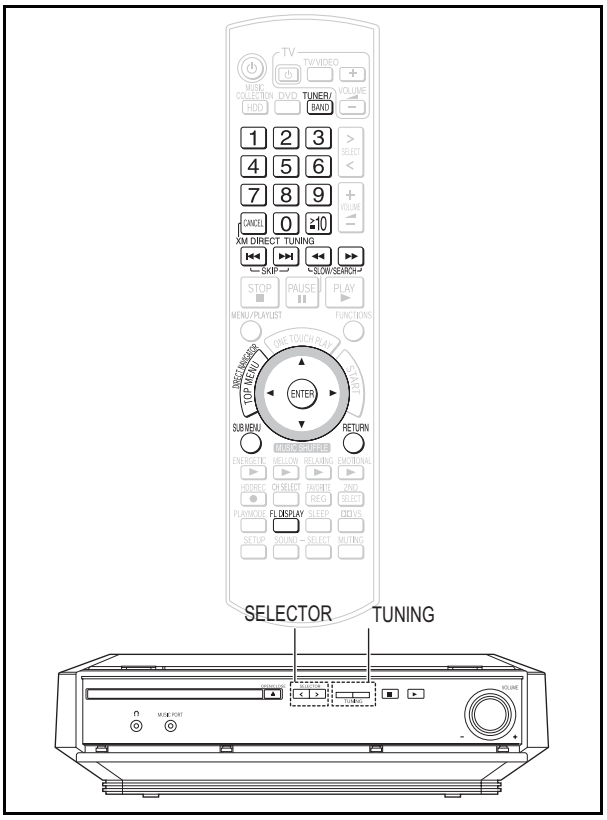
e.g., "DVD/CD"



[Note]

- Depending on the menu, some button operations cannot be performed from the TV's remote control.
- "Control Panel" can be selected directly by using a button on the TV's remote control (e.g. [SUB MENU]).
- Depending on the situation, not only the EZ Sync menu, but this unit's Start menu may be displayed as well. At this point, select "Disc" by pressing [▲▼] (TV's remote control) and selecting "Listen" or "Watch". After that, you can operate the EZ Sync menu by operating the TV remote control.
- You cannot input numbers with the numbered buttons on the remote control ([0] to [10]). Use this unit's remote control to input the IP Address, etc.

8.4. Using the XM® Satellite Radio



Radio operations are described mainly with the remote control. You can alternatively use the corresponding button on the main unit.

*1 [< >SELECTOR] *2 [∨TUNING∧]

XM Satellite Radio

XM Satellite Radio is the provider of satellite radio. XM offers more than 170 digital radio channels with music, talk, news, sports, comedy, traffic and weather reports. To enjoy XM Satellite Radio, subscription is required.

For more information, visit XM on the Web at www.xmradio.com for U.S. customers, or www.xmradio.ca for Canada customers.

How to Subscribe

XM monthly service subscription sold separately. XM Connect & Play antenna, or XM Mini-Tuner and Home Dock (includes home antenna) required to receive XM service (sold separately). Channels with frequent explicit language are indicated with an XL. Channel blocking is available for XM radio receivers by calling 1-800-XMRADIO (U.S. residents) or 1-877-GET-XMSR (Canada residents). Subscriptions subject to Customer Agreement available at xmradio.com (U.S. residents) and xmradio.ca (Canada residents). Only available in the 48 contiguous United States and Canada. © 2006 XM Satellite Radio Inc. All rights reserved. All other trademarks are the property of their respective owners.

- To subscribe in the U.S., visit XM on the Web at www.xmradio.com or call XM s Listener Care at 1-800-XMRADIO (1-800-967-2346).
- To subscribe in Canada, visit XM on the Web at www.xmradio.ca or call XM s Listener Care at 1-877-GET-XMSR (1-877-438-9677).

You should have your Radio ID ready (➞right).

Preparation

■ *The XM Satellite Radio ID*

Please confirm your XM Satellite Radio ID necessary for activating XM Satellite Radio as follows.

1 Press [TUNER/BAND]*1 to select "XM".

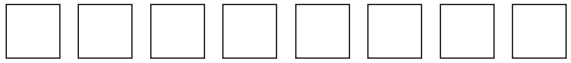
- Ensure the antenna is connected (OI page 19).

2 Press [XM DIRECT TUNING] and press [0] to select "XM 0" (XM channel 0).

"RADIO ID" is indicated in the display briefly, followed by an 8-digit alphanumeric ID.

3 Note your XM Satellite Radio ID.

- To avoid ambiguity, the letters I, O, S and F are not used in the ID.



- To exit, press [◀◀ , ▶▶] to select another channel.

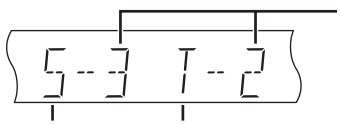
■ *Optimizing the XM signal reception*

The main unit has a signal strength indicator function that allows you to optimize the XM signal reception.

1 Press [TUNER/BAND]*1 to select "XM".

- Ensure the antenna is connected (OI page 19).

2 Press and hold [FL DISPLAY] until the XM signal status is displayed.



Signal strength:
4 (strong)
3 (good)
2 (marginal)
1 (weak)
0 (no signal)

3 Position the antenna for the best possible satellite signal reception.

The display changes depending on the signal strength.

- If the satellite signal is weak or not available, you can optimize for the terrestrial signal (where available).

4 Press [FL DISPLAY] to return to the previous display.

Tips for optimizing reception

- To prevent interference with wireless equipment, place the antenna away from this unit, Panasonic wireless sound system SH-FX80/SH-FX85, Panasonic wireless system SH-FX50/SH-FX60/SH-FX65, and other equipment that emits radio waves (such as radio equipment and microwave ovens).
- Place the antenna near a south-facing window with an unobstructed view of the sky for the best satellite signal reception.
- Refer also to the operating instructions of your XM antenna.

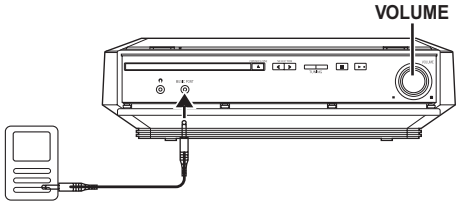
8.5. Using the Music Port

Using the Music Port

The Music Port allows you to connect and enjoy music from an external device (e.g. MP3 player) through this unit.

Preparation
To avoid distorted sound, make sure that any equalizer function of your external device is turned off.

1 **Reduce the volume and connect the external device (not included).**
Plug type: ∅ 3.5 mm (1/8") stereo mini plug

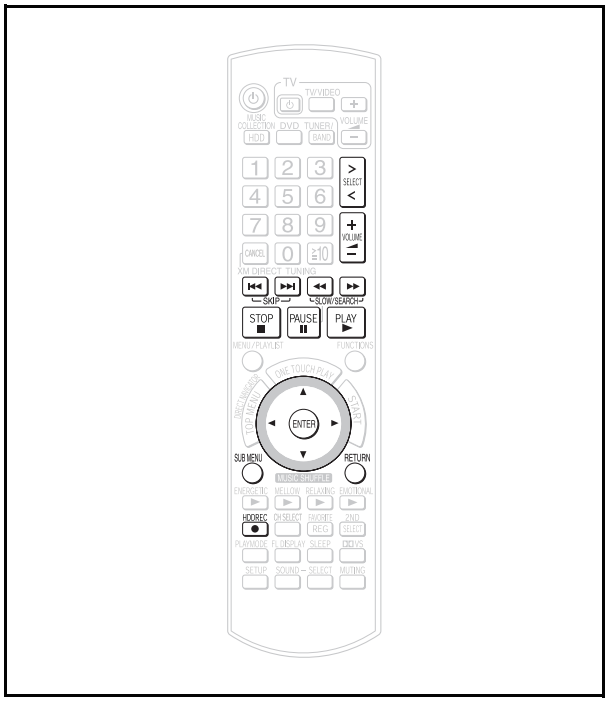


External device
Reduce the volume before connecting.

2 **Press [>SELECT<] to switch the selector to "MUSIC PORT".**

3 **Adjust the external device volume to a normal listening level, and then adjust the volume of the main unit with [+ – VOLUME].**

8.6. Using the iPod



By inserting the Universal Dock for iPod into the OPTION port and connecting iPod, you can play tracks (audio) through this unit s speakers. Additionally, you can use the remote control for this unit to perform operations such as play, stop, and record* operations on iPod.

* Only audio tracks can be recorded from iPod.

Preparation

1 Connect the Universal Dock for iPod and iPod as shown on OI page 78.

2 Press [>SELECT<] to switch the selector to "OPTION".

Playing tracks of iPod with the remote control for this unit

By performing the following operations on the remote control, you can play tracks from iPod.

▶	PLAY
❚❚, ■	PAUSE
I◀◀ ▶▶I	SKIP
◀◀ ▶▶	SEARCH
[+ − VOLUME]	Volume adjust

• Play will continue from the last track you were listening to before connecting the Universal Dock for iPod and iPod.

[Note]

Do not take off your iPod from this universal dock when you play your iPod back with this unit.

Recording tracks from iPod to the HDD

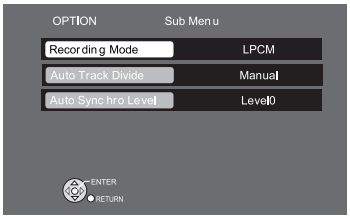
You can record tracks from iPod to the HDD.

Press [● HDD REC].

Recording starts in the set recording mode (→ below) and playing of iPod also starts automatically.

To change the recording mode

1 Press [SUB MENU] while stopped.



2 Select "Recording Mode" (OI page 33) with [▲▼] and make changes.
In addition to the recording mode, you can also change "Auto Track Divide" (OI page 38), or "Auto Synchro Level" (OI page 38).

To stop partway through

Press [■].

To return to the previous screen

Press [RETURN].

[Note]

• If "No compatible equipment is connected" is displayed, then no OPTION-compatible equipment is connected to the OPTION port.

[Tips]

To select a track you want to record

In "Playing tracks of iPod with the remote control for this unit" (→ left), operate the iPod, and press [● HDD REC] after pausing at the beginning of the track you want to record.

Compatible iPod

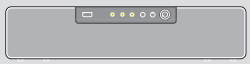
Name	Memory size
iPod nano 2nd generation (aluminum)	2GB, 4GB, 8GB
iPod 5th generation (video)	60GB, 80GB
iPod 5th generation (video)	30GB
iPod nano 1st generation	1GB, 2GB, 4GB
iPod 4th generation (color display)	40GB, 60GB
iPod 4th generation (color display)	20GB, 30GB
iPod 4th generation	40GB
iPod 4th generation	20GB
iPod mini	4GB, 6GB

• Compatibility depends on the software version of your iPod.

8.7. Wireless Surround

8.7.1. Multiroom

- **You can enjoy a Multiroom wireless sound system when you use the optional Panasonic wireless accessory SH-FX85. For details, please refer to the operating instructions for the optional Panasonic wireless accessory.**

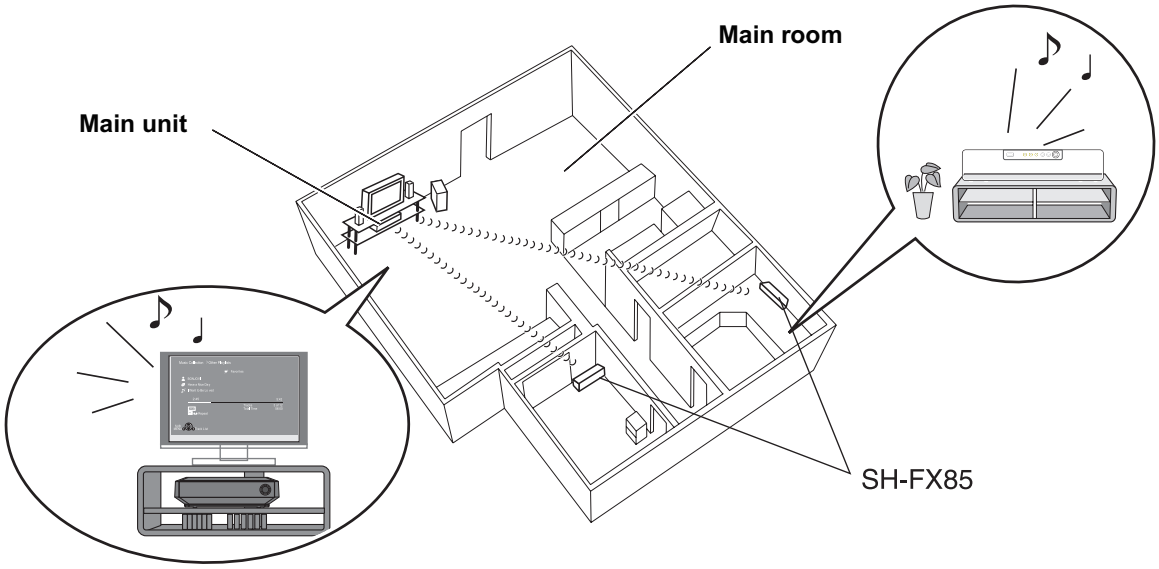


SH-FX85

Digital transmitter (included with SH-FX85)

About Multiroom
- You can enjoy the same track (audio) that is playing in the Main room (room where the main unit is placed).
- You can enjoy tracks (audio) from an audio source separate from the Main room.
- You can be in another room (a separate room) and perform basic controls such as play, stop, and skip, etc.

■ *Multiroom usage diagram*



8.7.2. Digital Transmitter Connection (SH-FX65T)

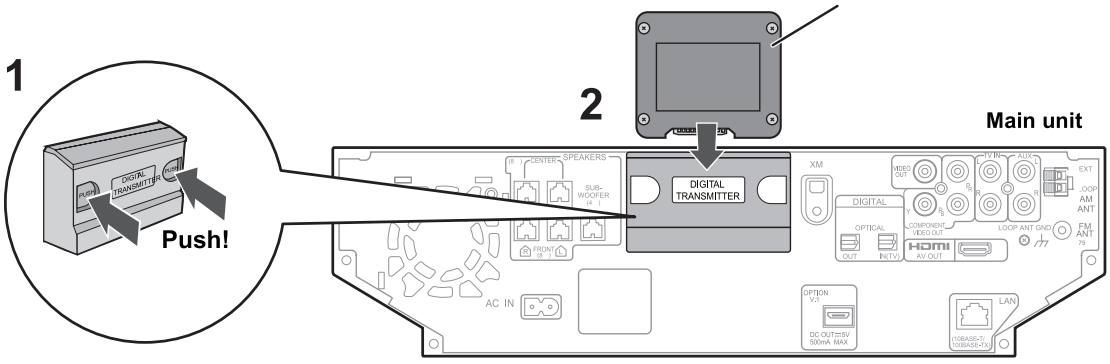
■ *Multiroom connection (How to insert the digital transmitter)*

[Note]
- Do not insert or remove the digital transmitter while the main unit is on.

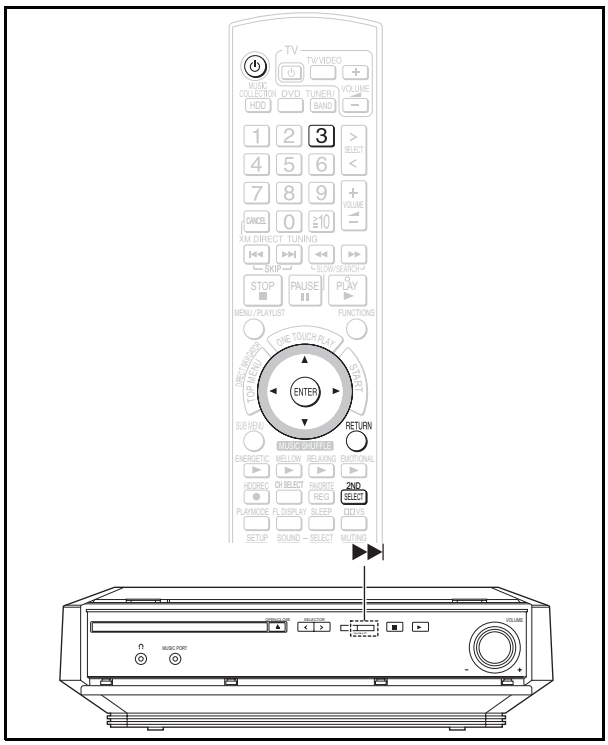
1 **Press in on the tabs marked "PUSH" to remove the lid.**

2 **Insert the digital transmitter included with SH-FX85 into the card slot on the back of the u nit.**

Digital transmitter (Insert fully until you hear a click.)



8.7.3. Using the Multiroom



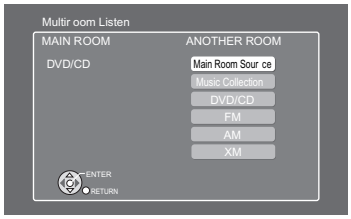
Preparation

1 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.
2 Create a Multiroom connection (➜ OI page 80).
3 Turn on the power for SH-FX85.
4 Press [⏻].

Selecting the source in another room

You can select the audio source in another room.

1 Press [2ND SELECT].



2 Press [▲ ▼] to select the item and press [ENTER].

Main Room Source:	The same source as in the main room is selected.
Music Collection※:	Tracks recorded to the HDD
DVD/CD:	CD tracks
FM:	FM Radio
AM:	AM Radio
XM:	XM Radio

Audio from the chosen selector will be output through the speakers in another room.

※ If the selector for "ANOTHER ROOM" is set to "Music Collection", you need to select the playlist (➜ OI page 46).

To return to the previous screen

Press [RETURN].

Operating this unit from another room

By operating the SH-FX85, you can control this unit and enjoy tracks from another room. For more information, refer to the operating instructions for SH-FX85.

.

Source	Button on the SH-FX85	
HDD, DVD/CD	▶	Play
	■	Stop
	⏮ ⏭	Skip
FM, AM, XM	⏮ ⏭	Select a channel (Preset Tuning)

Note

- When "Main Room Source" is selected, if you operate (stop, play or skip) from another room, audio of the main unit will stop, play or skip as well.

- **Setting the IDs for a second (or third) SH-FX85**
  If you want to add another SH-FX85, setting an ID with that SH-FX85 is also necessary. Operate following the steps below.
  1 While pressing [⏭] (main unit), press [3] on this unit s remote control.
  "P" is displayed (for approximately 60 seconds).
  2 While "P" is displayed, operate the ID setting with SH-FX85.

- **Depending on the settings of the selector for this unit and the unit in "ANOTHER ROOM", audio may not be heard.**
  – If the selector for "ANOTHER ROOM" is set to "DVD/CD" when "TV Audio" is set to "DIGITAL IN", audio will not be output. Change the settings of Multiroom.
  – When the selector for "ANOTHER ROOM" is set to "FM" or "AM", and if the selector for "MAIN ROOM" is set to "FM" or "AM", audio in "ANOTHER ROOM" will be muted automatically and operations can no longer be performed. Change the settings of Multiroom.
  – When "High-speed Recording" starts, audio is not output in "ANOTHER ROOM". However, if the selector for "ANOTHER ROOM" is set to "Main Room Source", then you can listen to the radio station that is currently selected in "MAIN ROOM".

8.7.4. Function Overview

Year 2007 PT models support wireless which includes FX65/FX66, wireless subwoofer and FX85 as described below:-

8.7.4.1. FX65/FX66

- The FX65/FX66 supports one-way wireless transmission only, that is, it will only transmit wireless audio signal to the rear surround speakers. The FX65/FX66 receiver module includes a D-AMP and SMPS. The transmitter interfaces with the main unit using serial communications to communicate information such as mute command request, link detection and ID setting request. Maximum range attainable is 15 meters.

8.7.4.2. Wireless Subwoofer (For PT1050 Only)

- The wireless subwoofer receiver module is similar in operation with FX65/FX66 in such a way that it only supports one-way wireless transmission. It also includes a D-AMP and SMPS. The difference in the wireless subwoofer receiver module is the way its hardware interprets the audio it receives from the transmitter since it is the same audio received by the FX65/FX66 receiver. Maximum range attainable is 30 meters.

8.7.4.3. FX85

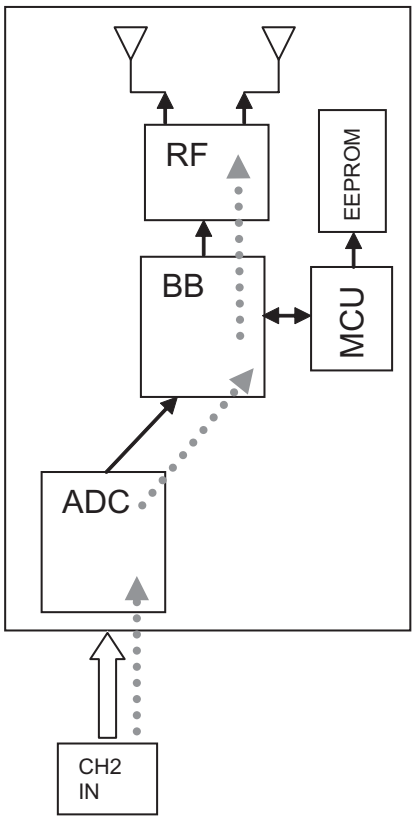
- The FX85 supports the multi-room function wherein it operates as a second room wireless receiver (up to a maximum of two). Maximum range attainable is 30 meters. It can send commands to the main unit to control functions such as Play, Stop, Forward Skip/Channel Up, Reverse Skip/Channel Down. It also has a built-in DAP pocket for stand-alone operation by inserting a DAP device (e.g. iPod) in the DAP pocket to play the device only via the device's own control buttons, FX85 cannot control the device using its own buttons. The transmitter interfaces with the main unit using serial communications to communicate information such as mute command request, link detection, ID setting request and button commands from the FX85 buttons (Play, Stop, Forward Skip/Channel Up, Reverse Skip/Channel Down). The FX85 receiver module has the following functions/terminals/buttons:

FX85 BUTTONS	FX85 FUNCTIONS
FX 85 Power Button	D-Amp
Selector Button	SMPS
Play Button	D-Port Connector
Stop Button	ID Set Switch
Forward Skip/Channel Up	MPort
Reverse Skip/Channel Down	
Volume Control	

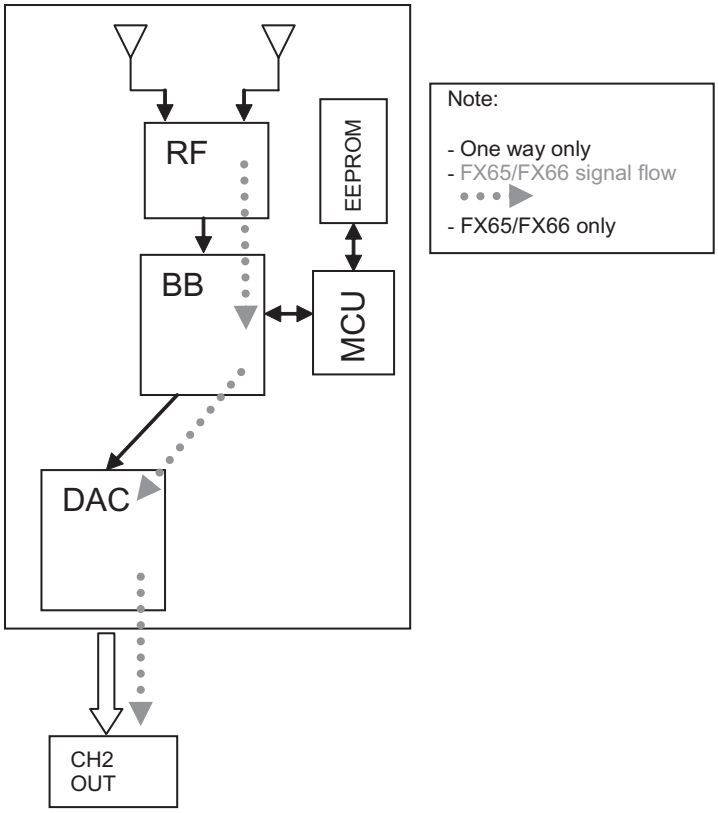
8.7.5. Block Diagram

- There are two types of transmitter cards, Type A and Type B, and two types of receiver modules, Type 1 and Type 2 for the wireless configuration. The block diagrams below describe the differences of each of the types.

8.7.5.1. TX-TYPE A / RX-TYPE 1



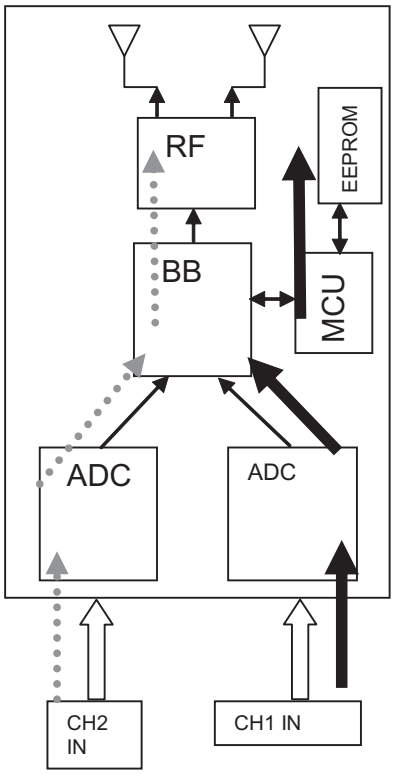
TX – Type A



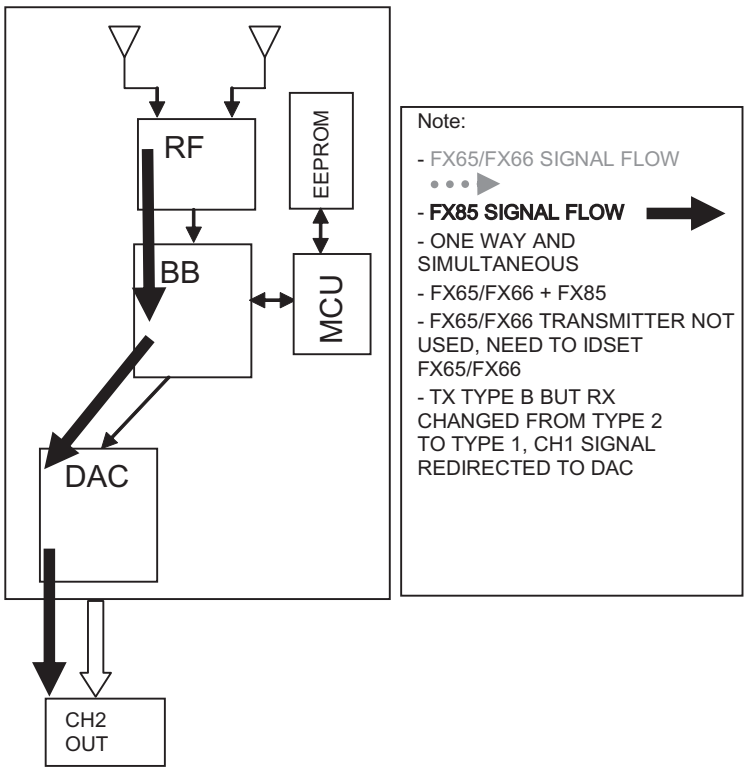
RX – Type 1

- Type A transmitter uses one ADC (Analog to Digital Converter) and transmits audio through Channel 2. Type 1 receiver (Rx) uses one DAC and output audio through Channel 2. The firmware (that is downloaded to EEPROM IC) multiplexes which channel to listen to (in this case Channel 2 since type A is transmitting from channel 2 In) by setting the baseband accordingly.

8.7.5.2. TX-TYPE B / RX-TYPE 2



TX – Type B



RX – Type 2

- Type B transmitter uses two ADC (Analog to Digital Converter) to send audio streams from Channel 1 and Channel 2 for the FX65/FX66 surround sound and FX85 second room audio, respectively. Type 2 receiver outputs audio through Channel 2. The software multiplexes which channel to listen to by setting the baseband accordingly. For example, if the receiver is configured as an FX85 receiver (Type 2), the baseband is configured to accept Channel 1 audio transmission and redirect it to Channel 2 Out. If the receiver is set as an FX65/FX66 or wireless subwoofer, the baseband is configured to accept channel 2 audio transmission and redirect it to the same Channel 2 Out.

8.7.6. Activation

- FX65/FX66 can be activated in the main unit by using either transmitter Type A or Type B and enabling surround sound by selecting Surround Music, DPL or Super Surround (Music/Movie).
- FX85 Wireless feature is enabled by default when the user uses transmitter type B.

8.7.7. LED Indication

- For FX65/FX66, there will be two-color LED that will be used to indicate Power On and Link. If link, the two-color LED will be green, else, it will be red.

  For FX85, the front panel will have LED indicators for Standby,, Wireless Link, Charge, Option and Music Port. During Power On, Standby LED will be OFF. Only during power OFF will this LED be ON (Red). Wireless Link indicator will be ON (Green) when link is established between TX and RX and OFF when link is lost. Pressing the selector button will toggle from any of the selector modes Wireless, Option and Music port. Only the currently selected mode will be ON (Green), the other two will be OFF. Charge LED will be ON (Red) once iPod charging is initiated.

8.7.8. Key Operation (FX85)

- **Selector Button**

  This button will be used to select Wireless, Option or M.Port and enabling the corresponding LED indicators for each mode. During Power On, by default, selector mode is set to Wireless when power is initially supplied to the system. But during Power On/OFF button, it will remember the last selector mode setting.

- **Play Button**

  This button will send command to the main unit to play CD/DVD as well as the iPod. This function is therefore meaningful only if the second room selector is in Main Source (with the first room user in CD/DVD or iPod) and iPod.

- **Stop Button**

  This button will send command to the main unit to stop CD/DVD as well as the iPod. This function is therefore meaningful only if the second room selector is in Main Source (if the first room user is in CD/DVD mode or iPod) and iPod.

- **Forward Skip/Channel Up**

  This button depends on the second room source currently selected. It will be interpreted as a Forward Skip by the main unit if the second room source is in Main Source (with the first room user is in CD/DVD or iPod mode) and iPod. It will be interpreted as a Channel Up (preset channels only) if the second room source is in FM, AM, or XM.

- **Reverse Skip/Channel Down**

  This button depends on the second room source currently selected. It will be interpreted as a Reverse Skip by the main unit if the second room source is in Main Source (if the first room user is in CD/DVD or mode) and iPod. It will be interpreted as a Channel Down (preset channels only) if the second room source is in FM, AM, or XM.

- **Volume Control**

  Volume control will be local to the FX85 module only. Default volume (TBD) will be set every time power is first supplied to the system or during exit from stand by mode.

- **ID-setting Operation**

  ID setting operation can be invoked by pressing fast-forward key in the main unit and three [3] key in the remocon. Once ID-setting is triggered, the receiver must press its ID-setting button within 60 seconds. During this period, the transmitter will be in open connect mechanism whereby any receiver can pair with the transmitter. After this period elapsed, the transmitter will revert back to using close connect code whereby only those receivers which have the same ID as the transmitter will be able to link. The user also has the option to exit the ID setting operation by pressing the same keys.

- **iPod Detection and Charging**

  iPod is detected once inserted on the FX85 and battery charging automatically starts.

  – The iPod Charging in Standby Mode:

  ●Upon iPod insertion detection and FX85 is in Power OFF (stand by), FX85 set will enter iPod charging Standby Mode.

  ●The FX85's CHARGE LED will light up whenever the iPod is charging.

  ●FX85 will charge the battery up to five hours. After this period, FX85 will not try to recharge the iPod.

  ●After battery full condition, even if the iPod is operated such as play, FX85 will not retry to recharge the iPod (timer will start immediately once iPod is inserted).

  ●Re - charging of the battery in iPod Charging Standby Mode can be done only by removing and reinserting the iPod to the dock.

  – The iPod charging in Power On Mode:

  ●The iPod automatically charges its battery whenever it is connected during Power ON.

  ●The FX85's CHARGE LED will light up whenever the iPod is charging.

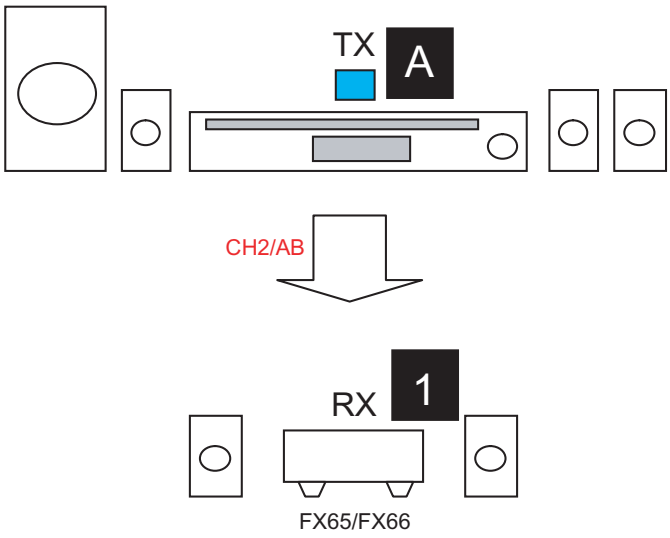
  ●FX85 will continue charging the iPod as long as it is inserted (no charging time limit of five hours).

8.7.9. FX Configurations

There are four types of configurations for the FX series. This is explained by the following illustrations below:

Case 1: FX65/FX66

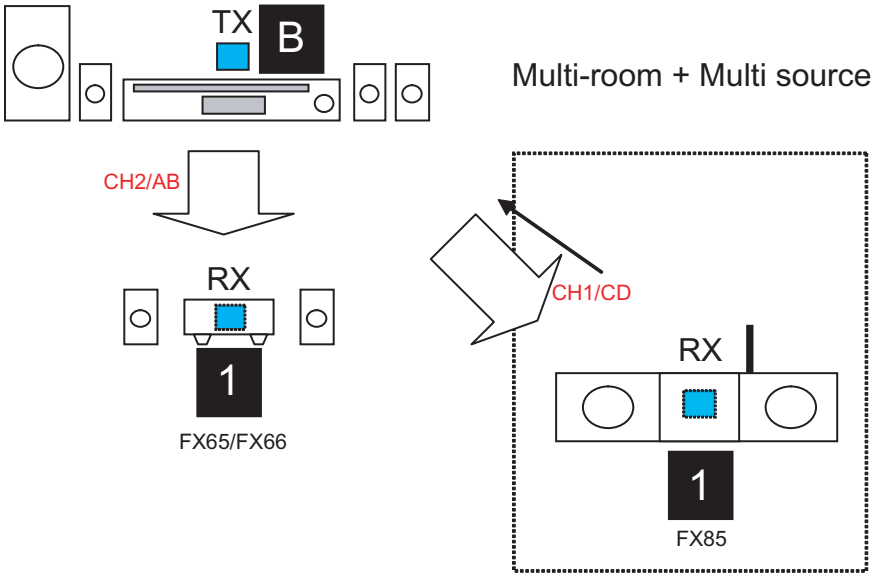
- This is the basic configuration of FX65/FX66 whereby it is only receiving wireless surround audio signal from the main set. This uses a Type A transmitter which is only able to send audio in one direction. Audio is sent using streams AB through Ch 2.



Case 2 A: FX65/FX66 + FX85

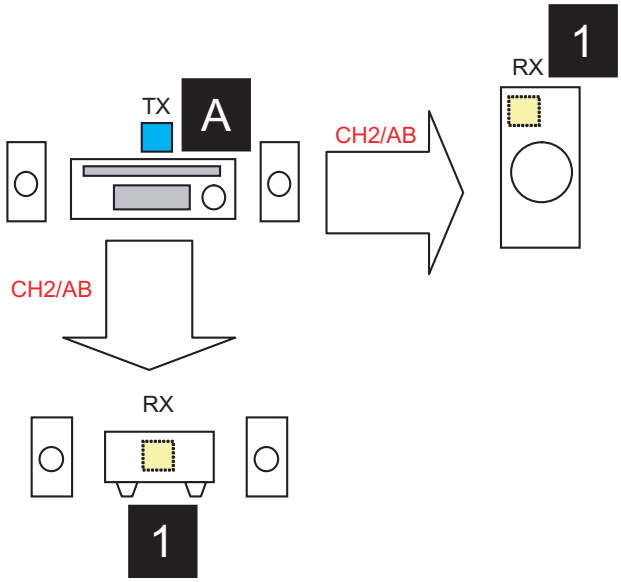
- In this configuration, a second receiver, an FX85, in another room is listening to another audio source from the main set. The FX85 also is able to send command to the main set such as Play, Stop, Skip, and Preset Tuner Channel Up/Down. This configuration uses Type B transmitter which is an upgrade of the Type A and can be used on Type 1 (FX65/FX66). This transmitter is able to send audio signal for second room via Ch 1 and first room via Ch 2.

  In this configuration, streams AB is used to transmit the audio from main unit to the first room Type 1 receiver (FX65/FX66) via Ch 2. While the second room audio is transmitted through stream CD via Ch 1.



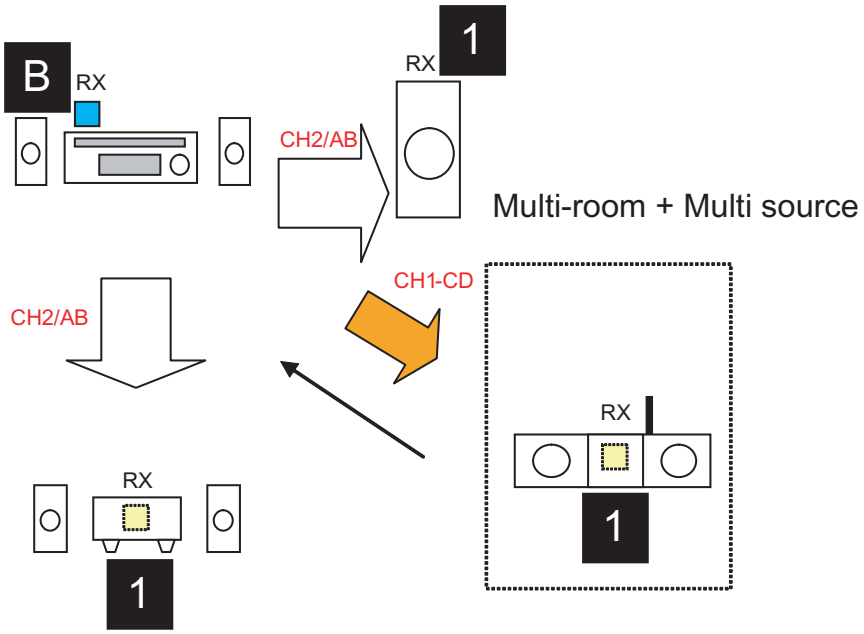
Case 3 A: Wireless Subwoofer

- This configuration, Type A transmitter send signals to subwoofer and Type 1 receiver (FX65/FX66) via channel 2, which is the same audio signals sent to FX65/FX66 as well. The subwoofer only decodes the low frequency signal.

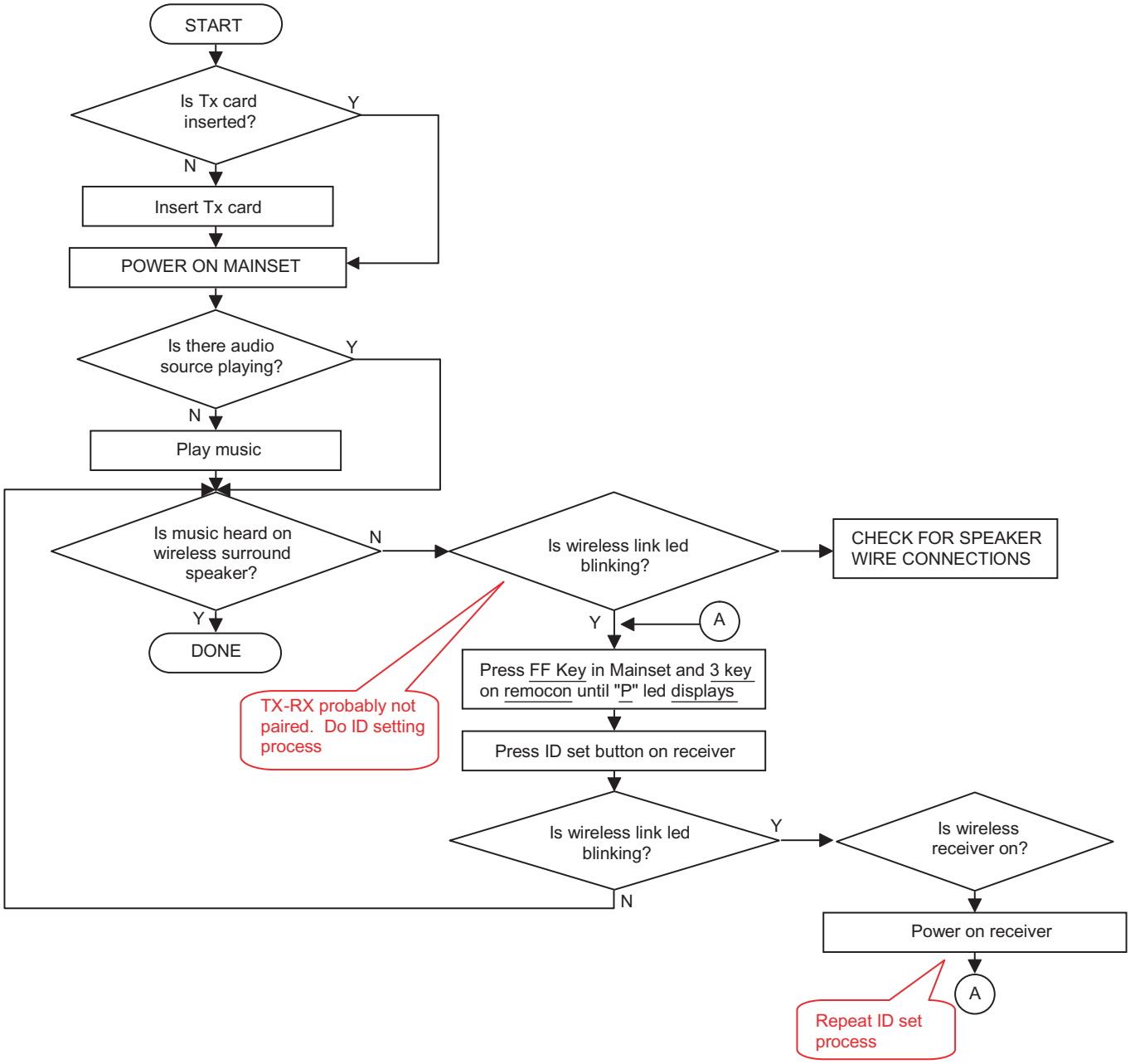


Case 3 B: FX65/FX66 + FX85 + Wireless Subwoofer (for PTX7, PT1050)

- In this configuration, all audio source for the Type 1 subwoofer and Type 1 first room receiver (FX65/FX66) through streams AB via Ch 2 and Type 2 second room receiver (FX85) comes from transmitter B through streams CD via Ch 1. For this configuration, the user must perform ID setting for FX85 if it is sold as an accessory, but for bundled type, it already is paired with the transmitter.


B
RX
RX
1
CH2/AB
Multi-room + Multi source
CH1-CD
CH2/AB
RX
RX
1
1

8.7.10. User Operation Flow



8.7.11. Baseband Settings Update from EEPROM IC

- The software will read from an external EEPROM IC to get the selected baseband IC settings. Not all baseband register settings (a total of 512 bytes) will be read from the EEPROM IC, though. Aside from getting the baseband settings from the EEPROM IC, it is also used to enable FCC testing, select the application type and entering into doctor mode (this can be enabled also by sending a command via the main unit).

8.7.12. Doctor Mode

- For normal operation but automatic frequency selection is disabled, it can enter into Doctor Mode. This feature is hidden from normal user and will be used by the service center to fix to a particular RF Channel. With doctor mode, the user can disable frequency automatic allocation and sniffer and be able to select a fix RF Channel (Channels 1, 2 or 3) by a combination or remote control keys. Refer to Section 9.4 for Wireless Doctor Mode.

8.8. Disc Information

8.8.1. Disc Playability (Media)

Discs that can be recorded to this unit's HDD (HDD)

Disc	Logo	Data type	Remarks
CD		CD	Music discs • This unit is not compatible with HDCD. • Operation and sound quality of CDs that do not conform to CD-DA specifications (copy control CDs, etc.) cannot be guaranteed.
CD-R/RW	—	CD / WMA*1 / MP3*1 *1See also "File Extension Type Support (WMA/ MP3/JPEG)" (Section 7.8.2.)	By recording in CD-DA, WMA, or MP3 format, and closing the session or finalizing*2 the CD-R/CD-RW disc when recording is complete, you can record tracks from the disc to this unit s HDD. *2 A process that allows play on other equipment.
DVD-RAM		MP3	This unit can record only MP3 files on these recordable DVDs. DVD-R/RW discs need to be finalized.
DVD-R/RW			

• DVD content cannot be recorded to this unit's HDD (except for MP3 files in recordable DVD).

Discs that can be played

■ ***Commercial discs***

Disc	Logo	Indicated in these instructions by	Remarks
DVD-Video		DVD-V	High quality movie and music discs
DVD-Audio		DVD-A	High fidelity music discs* * Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" (OI page 61, Other Menu).
VCD		VCD	Music discs with video Including SVCD (Conforming to IEC62107)
CD		CD	Music discs • This unit is not compatible with HDCD. • Operation and sound quality of CDs that do not conform to CD-DA specifications (copy control CDs, etc.) cannot be guaranteed.

■ ***Recorded discs*** *(Yes: Can be used, No: Cannot be used)*

Disc	Logo	Recorded on a DVD recorder, etc.		Recorded on PC, etc.			Necessity of finalize*6
		DVD-VR*2	DVD-V*4	WMA	MP3	JPEG	
DVD-RAM		Yes	—	No	Yes	Yes	Not necessary
DVD-R/RW		Yes	Yes	No	Yes	Yes	Necessary
DVD-R DL		Yes*3	Yes	No	No	No	Necessary
+R/+RW	—	No	(Yes)*5	No	No	No	Necessary
+R DL	—	No	(Yes)*5	No	No	No	Necessary
CD-R/RW*1	—	—	—	Yes	Yes	Yes	Necessary*7

• It may not be possible to play the discs in all cases due to the type of discs, the condition of the recording, the recording method and how the files were created [Refer to Section 8.8.2 File Extension Type Support (WMA/MP3/JPEG)]

*1 This unit can play CD-R/RW recorded with CD-DA or Video CD format.

WMA MP3 JPEG This unit also plays HighMAT discs.

*2 Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

*3 Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

*4 Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.

*5 Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

*6 A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary", the disc must first be finalized on the device it was recorded on.

*7 Closing the session will also work.

• You can play DVD-Audio; however, still pictures may be displayed enlarged.

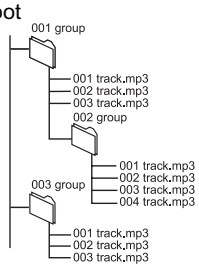
8.8.2. File Extension Type Support (WMA/MP3/JPEG)

Format	Disc	Extension	Reference
WMA	CD-R/RW	".WMA" ".wma"	• Compatible compression rate: between 48 kbps and 320 kbps • You cannot play WMA files that are copy protected. • This unit is not compatible with Multiple Bit Rate (MBR: a file that contains the same content encoded at several different bit rates).
MP3	DVD-RAM DVD-R/RW CD-R/RW	".MP3" ".mp3"	• Sampling frequency and compatible compression rate DVD-RAM, DVD-R/RW : 11.02, 12, 22.05, 24 kHz (8 160 kbps) 44.1, 48 kHz (32 320 kbps) CD-R/RW : 8, 11.02, 12, 16, 22.05, 24 kHz (8 160 kbps) 32, 44.1, 48 kHz (32 320 kbps)
JPEG	DVD-RAM DVD-R/RW CD-R/RW	".JPG" ".jpg" " JPEG" ".jpeg"	• JPEG files taken on a digital camera that conforms to DCF Standard Version 1.0 are displayed. – Files that have been altered, edited or saved with picture editing software may not be displayed. • This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g., TIFF) or play pictures with attached audio.

- If groups were created away from the root like "002 group" in the illustration below, the eighth one onwards is displayed on the same vertical line in the menu screen.
- There may be differences in the display order on the menu screen and PC screen.
- This unit cannot play files recorded using packet write.
- This unit is not compatible with ID3 tags.

Naming folders and files (Files are treated as contents and folders are treated as groups on this unit.)
At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times).

e.g., MP3



DVD-RAM
- Discs must conform to UDF 2.0.

DVD-R/RW
- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit is not compatible with multi-session. The default session only is played.

CD-R/RW
- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

Note about using a DualDisc
The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so play may not be possible.

Regarding DVD-Audio
Some multi-channel DVD-Audio will prevent down-mixing (OI page 108, Glossary) of all or part of their contents if this is the manufacturer's intention. When playing such discs, or such parts of the disc, unless the number of connected speakers is the same as the disc s channel specification, audio will not be output properly (e.g., part of the audio is missing, multi-channel audio cannot be selected and audio is played in two channels). Refer to the disc's jacket for more information.

■ *Discs that cannot be played*

Blu-ray, HD DVD, AVCHD discs, Version 1.0 of DVD-RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD, DivX Video Discs, Photo CD, DVD-RAM that cannot be removed from their cartridges, 2.6-GB and 5.2-GB DVD-RAM, PAL discs* and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

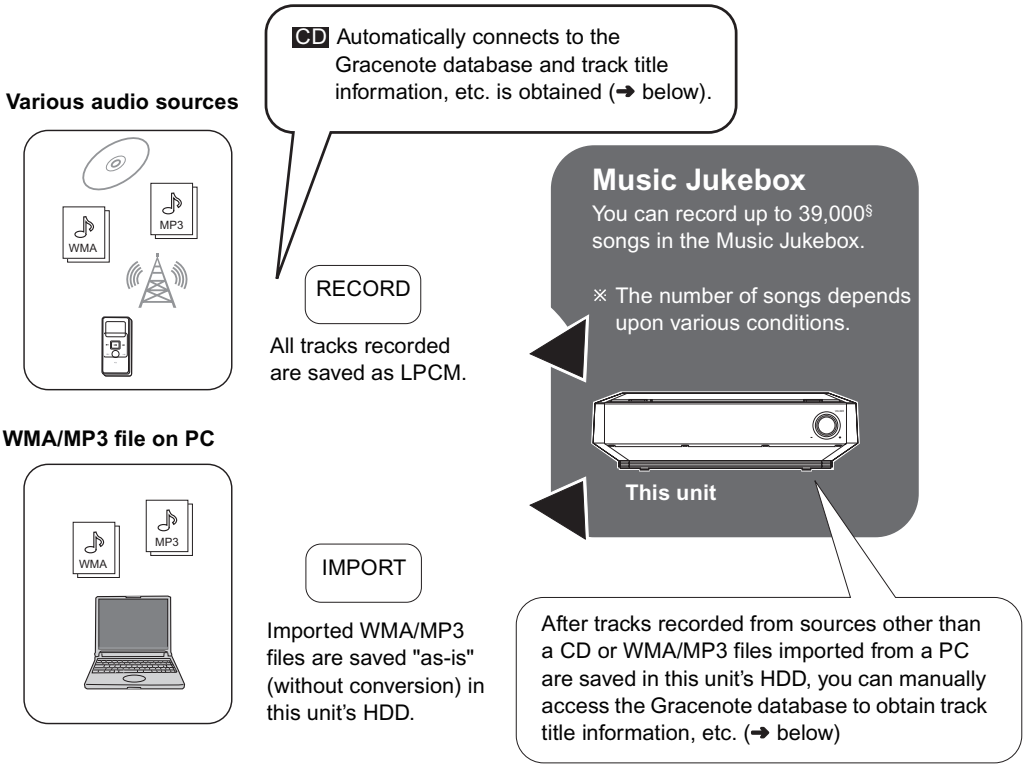
* You can play DVD-Audio; however, still pictures may be displayed enlarged.

9 New Features

9.1. As a Music Jukebox (Using HDD)

Recording
This unit can record audio to the internal HDD from a variety of sources including commerical CDs, radio, music files (WMA/MP3), and audio from externally connected devices (portable digital audio players, etc.). This unit can also access the Gracenote database to obtain title information for music CDs, radio broadcasts, or other analog recordings made with externally connected devices. (For recording details, see page 32 of operating instruction.)

Importing from a PC
You can import WMA/MP3 files from your PC to this unit. This differs from recording because the files are saved in the HDD in the same format as they are saved on your PC. (LPCM and AAC conversion is not performed.)


CD Automatically connects to the Gracenote database and track title information, etc. is obtained (➜ below).
Various audio sources
WMA
MP3
RECORD
All tracks recorded are saved as LPCM.
Music Jukebox
You can record up to 39,000§ songs in the Music Jukebox.
※ The number of songs depends upon various conditions.
This unit
WMA/MP3 file on PC
WMA
MP3
IMPORT
Imported WMA/MP3 files are saved "as-is" (without conversion) in this unit's HDD.
After tracks recorded from sources other than a CD or WMA/MP3 files imported from a PC are saved in this unit's HDD, you can manually access the Gracenote database to obtain track title information, etc. (➜ below)

9.1.1. Built-in Gracenote® Database

The Gracenote® database is a database used to search and retrieve CD title information.
By connecting to the Internet, the unit can access the Gracenote server and obtain the most recent CD title information. When a CD is inserted or recording from a CD begins, the unit will automatically search for and obtain information about the inserted CD (➜ page 34 of operating instruction).

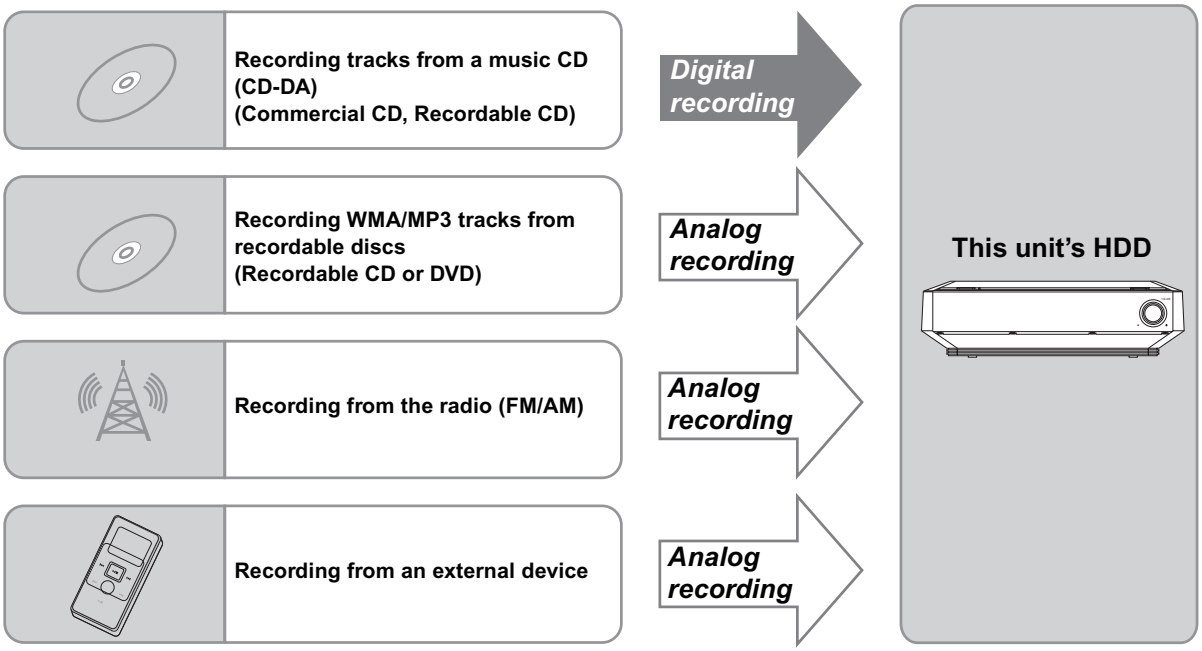
If this unit is not connected to the Internet:
A portion of the Gracenote database comes pre-installed on this unit, so titles and artist information can be obtained. Please note however that the newest CD titles, etc. may not be registered yet to the internal database. This unit has an internal database containing information for approximately 350,000 album titles.

Searching for titles other than on CD:
Using the Gracenote database, information can also be obtained for other types of tracks recorded to the HDD (➜ page 73 of operating instruction, Searching for track names, artist names and album names within the Gracenote database and entering them automatically).

- If it takes a long time to access the Gracenote database, check if the unit s network connection (➜ page 20 of operating instruction) and the network settings (➜ page 95 of operating instruction) are correct.
- Some CDs may have title information that is similar to other CDs. In this case, try obtaining the CD title information again (➜ page 73 of operating instruction), or after recording to the HDD has completed enter the CD title information manually (➜ page 72 of operating instruction).
- For some CDs, multiple title suggestions will be found, therefore select the appropriate title (➜ page 73 of operating instruction). When you want to change the title, manually make changes after recording to the HDD is complete (➜ page 72 of operating instruction).

9.1.2. Types of Recordings

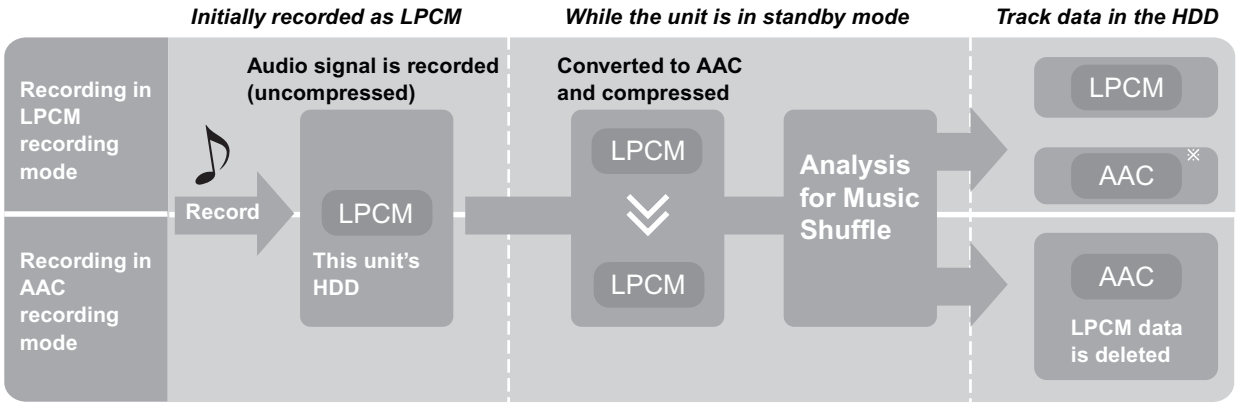
You can make these kinds of recordings.


Recording tracks from a music CD (CD-DA) (Commercial CD, Recordable CD)
Digital recording
Recording WMA/MP3 tracks from recordable discs (Recordable CD or DVD)
Analog recording
Recording from the radio (FM/AM)
Analog recording
Recording from an external device
Analog recording
This unit's HDD

IMPORTANT
DVD content cannot be recorded to this unit's HDD (except for MP3 files in recordable DVD).

How recordings work

Tracks are initially recorded to the HDD and saved as LPCM. When the recording mode is set to AAC, AAC conversion takes place while the unit is in standby mode. In addition to AAC conversion, track analysis for the "Music Shuffle" function (➜ page 49 of operating instruction) also takes place during standby mode.



※With LPCM recording mode, AAC data created (XP mode only) is not displayed in the Track List.

■ *About AAC conversion of recorded tracks and Music Shuffle analysis*

- Conversion/analysis is performed when the unit is in standby mode. 2 minutes after the unit is set to standby mode, conversion/analysis starts and the unit s display starts to show "_ _ _ _". Leave the power cord plugged in.
  You can also perform conversion/analysis immediately (➜ page 42 of operating instruction).
- This unit usually takes about one-third of the recording time to complete analysis and conversion.
  For example, a 60-minute recording will take about 20 minutes to complete conversion and analysis. (For tracks imported from a PC, time will be shorter as the tracks only need to be analyzed.)
- Tracks can be played even if conversion and analysis is incomplete. However, the same track may sound slightly different before and after AAC conversion.
- You can also compress LPCM tracks to AAC to increase the amount of the available space on the HDD (see page 43 of operating instruction).

9.1.3. Recording Modes

With these settings you can adjust the audio quality when recording tracks to the HDD. Recordings made with higher bitrates use more space, reducing the total available space on the HDD.

Recording mode

	Recording mode/ bitrate	Possible recording time	Explanation
Higher audio quality	LPCM	Approx. 104 hours	The audio signal is digitally recorded without any compression.
	AAC(XP) 128 kbps	Approx. 1,230 hours	The audio is initially recorded as LPCM and converted to AAC when this unit is in standby mode. AAC is a compression format which compresses the audio data into a smaller size. Audio quality and the amount of tracks that can be recorded will differ depending on the bitrate.
	AAC(SP) 96 kbps	Approx. 1,640 hours	
Longer recording time	AAC(LP) 64 kbps	Approx. 2,460 hours	

Recording mode settings at the time of purchase:
The recording mode for each selector is set to "LPCM" at the time of purchase. The recording mode for each selector can be set individually (➜ OI page 34).

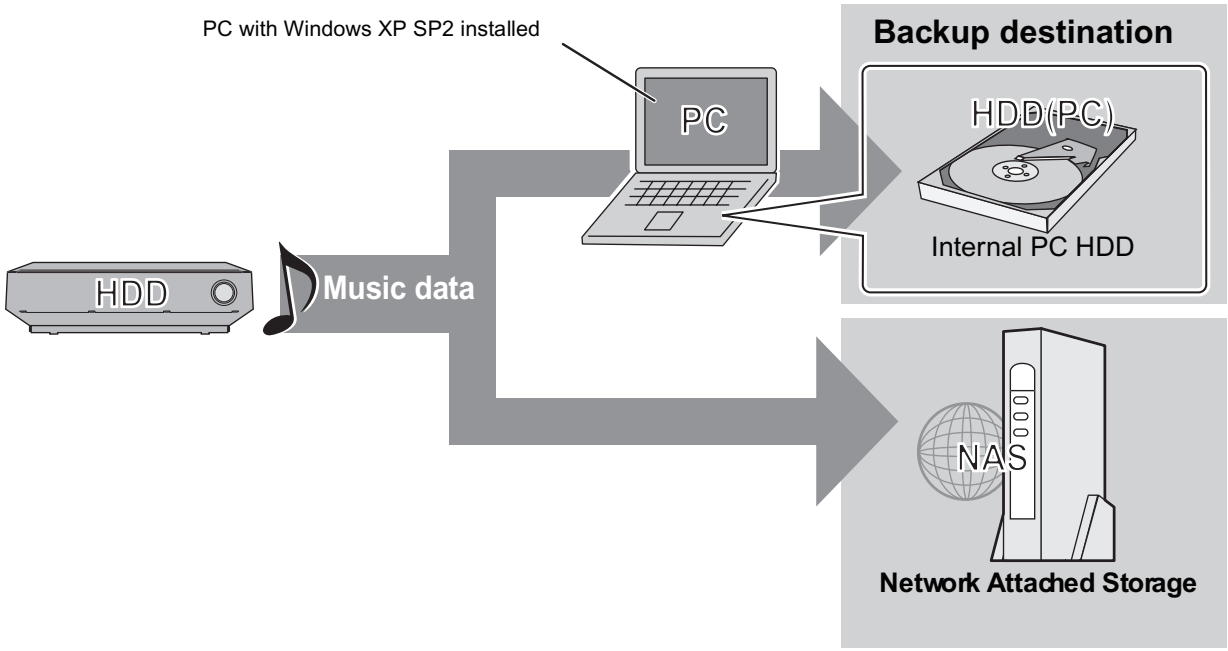
If you want to change the recording mode to AAC, please note the following:
Recordings made to this unit are initially recorded in LPCM, and then are converted to AAC. Therefore if you are making continuous, long recordings, the maximum amount of recordings you can make must fit within the LPCM limits for maximum possible recording time as described in the chart above. In the event that you are making many recordings, continue recording after the music data has been converted to AAC format (➜ OI page 32, How recordings work).

Note
LPCM audio quality does not exceed the audio quality of the original recording.

9.1.4. Backing up to HDD Data to a PC

We recommend backing up the tracks on the HDD regularly using a PC or NAS (Network Attached Storage). In the event that this unit requires service and the music data is damaged or lost, you can restore music from the last time you backed up.

The necessary equipment and recommended operating system for creating a backup:
- A PC operating with Windows XP SP2 installed
- A hard disk drive (HDD) with adequate available space, or a NAS device. Other media (DVD-R, etc.) cannot be used for creating a backup of your music library.
- When creating a backup, we recommend using a fast network connection such as 100BASE-T LAN.
- For further information about backups visit the following homepage.
  http://panasonic.jp/support/global/cs/audio



Preparation
1 Connect the unit to a PC network (➜ OI page 20), or directly connect it to a PC (➜ OI page 90).
2 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.
3 Press [⏻].
4 Press [MUSIC COLLECTION] to switch the selector to "Music Collection".

Settings to check on the PC

1 Create a folder using the name below, and set the folder to "Shared". (This folder then becomes the save destination for the backup data.)

Folder name: ptxbckup

2 Check the PC name.

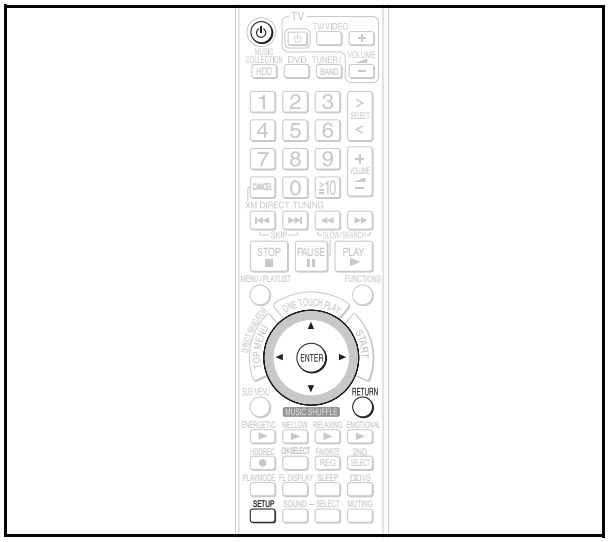
Note

About backup data

The backup data is created with encryption. Therefore, backup data cannot be played or copied to another device. Furthermore backups can only be restored on the unit from which it was created.

Tips

If you do not have the equipment required for creating a backup
- Make certain to keep the recording source (CD, files, etc.).
- For information about the shared folder settings, see "Importing WMA/MP3 from a PC" (➜ OI page 40).



Backing up data recorded to the HDD

Cautions about backup data:
Be careful not to perform any of the following:
- Do not open backup data with applications or software, and do not change the contents.
- Do not compress the backup data.
- Do not change the backup data file name or change the saved location.

Perform "Preparation" and "Settings to check on the PC" as described on OI page 87.

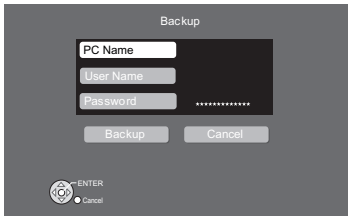
1 **Press [SETUP].**

2 **Press [▲ ▼] to select "Other Setup" and press [ENTER].**

3 **Press [▲ ▼] to select "Maintenance" and press [▶].**

4 **Press [▲ ▼] to select "Backup/Restore" and press [ENTER].**

5 **Press [▲ ▼] to select "Backup" and press [ENTER].**



6 **Press [▲ ▼] to select "PC Name" and press [ENTER].**

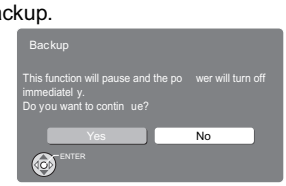
When the PC name is displayed
The PC name and other information that was used when previous backups and imports (➜ OI page 40) were performed may be displayed. In this case, check the PC name again, and if necessary, follow the steps below to make changes.

7 **Enter the characters (➜ OI page 69).**
Input the "User Name" and "Password" in steps 6 and 7 in the same manner.

8 **Press [▲ ▼ ◀ ▶] to select "Backup" and press [ENTER].**
Backup begins.
A message will be displayed, indicating that backup is complete. The unit will briefly stay this way, and then it will turn off automatically shortly after.

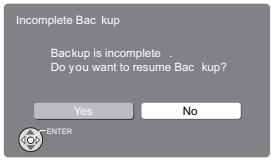
To return to the previous screen
Press [RETURN].

To cancel backup
1 Press and hold [⏻] during backup.



2 Press [◀ ▶] to select "Yes" and press [ENTER].
- This unit turns off and backup canceled.

To continue a previously canceled backup
1 After backup is canceled, press [⏻] to turn the unit on again.
The following message is displayed.



2 Press [◀ ▶] and select "Yes", then press [ENTER].
Follow the steps given on screen, and start backup again.

Note
- When the backup is canceled partway through, the data becomes unusable. Finish the backup as soon as possible.
- The settings for the Power Off Mode for this unit will enter "Power-Save Mode" (→ OI page 93) until the backup is complete.
- When performing a backup, all timer settings will be set to "Off". If you use a timer, you will need to set to "On" again (➜ OI page 85).

If the backup aborted due to critical errors or abnormal termination
After the message is displayed on the unit, this unit will automatically turn off.
In this situation, turn the power on again and continue the backup.

A note about the second (and subsequent) backups
Only newly added tracks and changes made since the previous backup was created will be backed up, therefore the backup will take less time to finish than the first time.

Restoring backed up data

This function will restore the backup data that was saved on your PC to this unit.
If the HDD requires service, please wait until the HDD has been repaired before restoring the backup to the HDD.

Restoring the backup data to the HDD will reset the HDD (no tracks on the HDD). If restoring fails, the content of the HDD will be lost. When restoring the backup data, therefore, please exercise the utmost caution.

Perform "Preparation" and "Settings to check on the PC" as described on OI page 87.

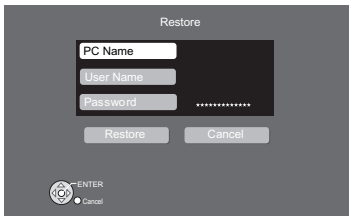
1 Press [SETUP].

2 Press [▲ ▼] to select "Other Setup" and press [ENTER].

3 Press [▲ ▼] to select "Maintenance" and press [▶].

4 Press [▲ ▼] to select "Backup/Restore" and press [ENTER].

5 Press [▲ ▼] to select "Restore" and press [ENTER].



6 Press [▲ ▼] to select "PC Name" and press [ENTER].

When the PC name is displayed
The PC name and other information that was used when previous backups and imports (➜ OI page 40) were performed may be displayed. In this case, check the PC name again, and if necessary, follow the steps below to make changes.

7 Enter the characters (➜ OI page 69).

Input the "User Name" and "Password" in steps 6 and 7 in the same manner.

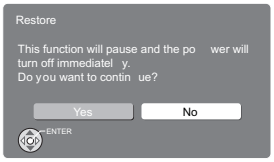
8 Press [▲ ▼ ◀ ▶] to select Res tore and press [ENTER].

Restore begins.
A message will be displayed, indicating that restore is complete. The unit will briefly stay this way, and then it will turn off automatically shortly after.

To return to the previous screen
Press [RETURN].

To cancel restore

1 Press and hold [⏻] during restoring.



2 Press [◀ ▶] to select "Yes" and press [ENTER].
- This unit is turned off and the restore is canceled.
- If restore is canceled before completion, all progress up to the point of cancelation will not be recorded and the HDD will be completely empty. Restore this unit again later.

Note

- Restore may be canceled if your PC is turned off in an irregular manner or is forced to shut down due to errors. In this situation, restore again from the beginning. However, backups may not restore when the backup data contains abnormalities.

9.2. Easy Location of HDD Recording Contents

You can easily search for tracks that have been recorded to this unit's HDD by using variety of categories based on your preferences. From the lists created by your search, you can select the tracks that you want to listen to. These lists that are created are preferred to as "Playlists". Tracks are played when a selection is made in a playlist. Playlists are classified into the following categories.

9.2.1. Playlist Search Method

■ *Playlists with tracks sorted by basic details (artist, album, track)*

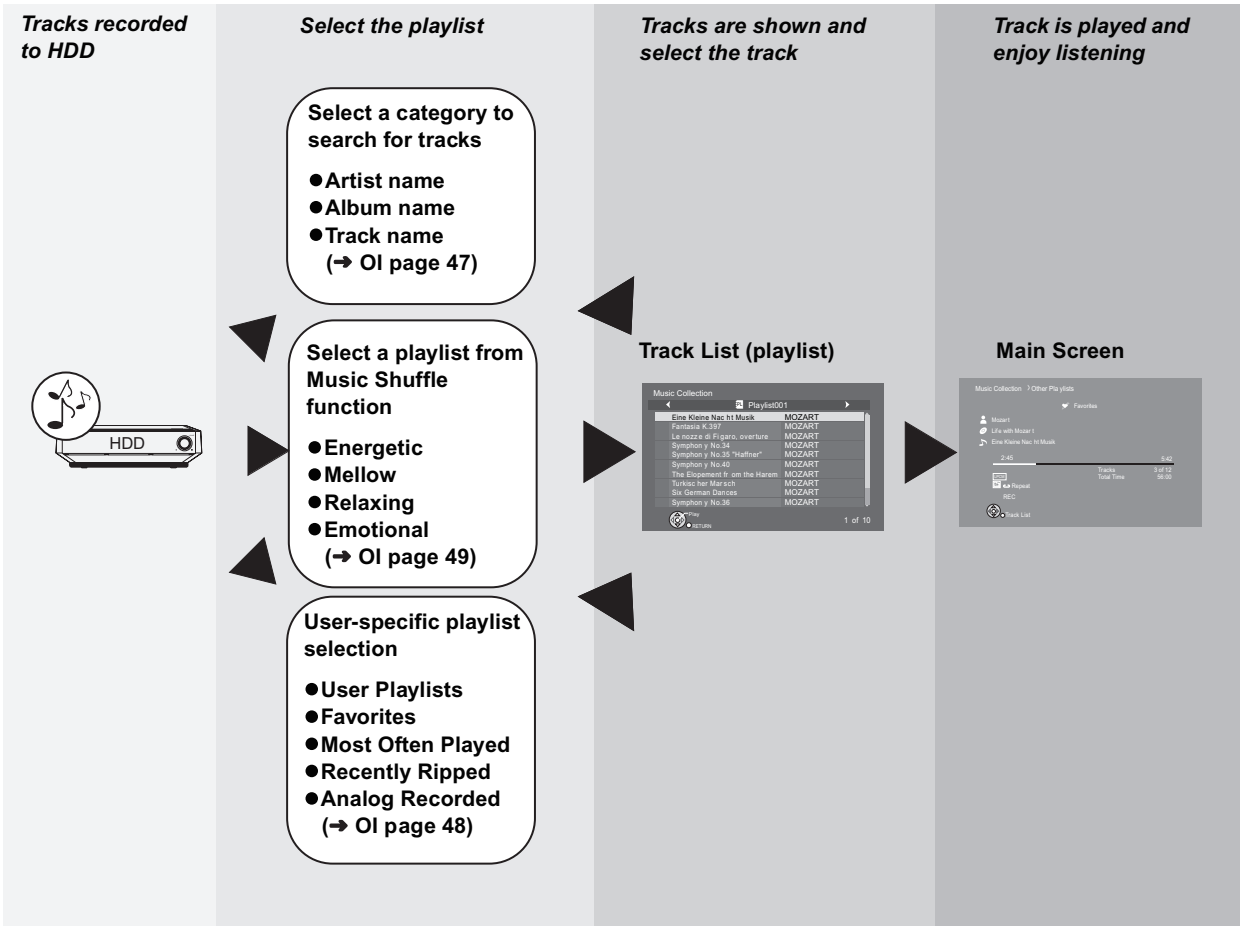
These playlists are created using basic details such as artist names or album names. Also you can search tracks by track names (Refer OI page 47).

■ *Playlists generated by Music Shuffle function*

"Music Shuffle" is a function that automatically decides the feeling or impression of tracks, and then classifies the track into one of four different groups. If you select a specific group from "Music Shuffle", the tracks within the group will appear in a random playlist each time. Depending on the track, some tracks cannot be classified into any groups of Music Shuffle playlists (Refer OI page 49).

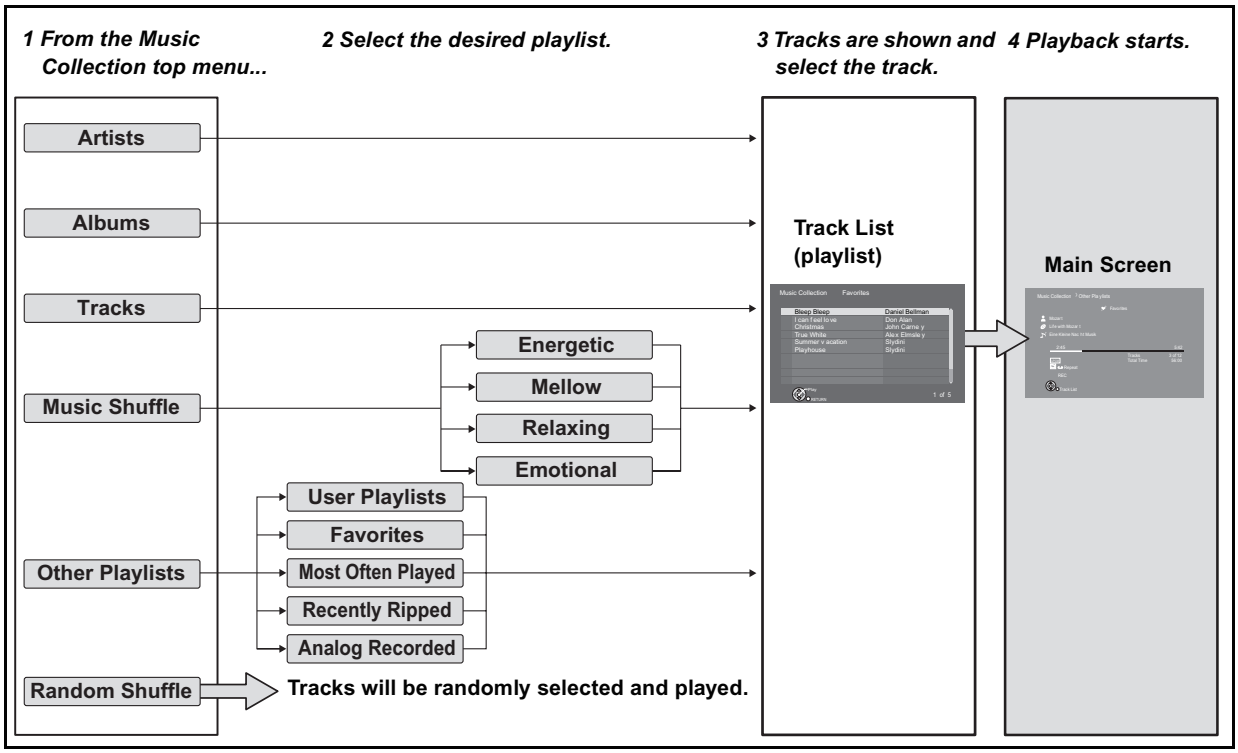
■ *User-specific playlists ("Other Playlists" in the top menu of Music Collection)*

Aside from the playlists created by using basic details (as mentioned above), this unit has some other special types of playlists such as "User Playlists", which allow you to arrange any tracks in any order, or "Most Often Played" playlist, the tracks of which are automatically selected and arranged based on the frequency of playback. There are other user-specific or automatically arranged playlists like "Favorites", "Recently Ripped" and "Analog Recorded". For more information about these useful playlists, (Refer OI page 48).



You can use several methods to easily find tracks in the HDD that you want to listen to.

Searching for/selecting tracks in the HDD



HDD

Preparation

1 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.

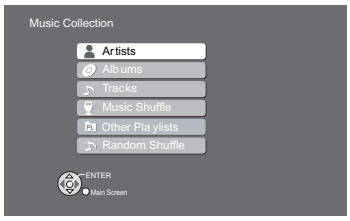
2 Press [⏻].

Searching from various playlists

1 **Press [START].**

2 **Press [▲ ▼] to select "Listen" and press [ENTER].**

3 **Press [▲ ▼] to select "Music Collection" and press [ENTER].**



Different ways to search for tracks

	Artists Search by artist name (Refer OI page 47)
	Albums Search by album name (Refer OI page 47)
	Tracks Search by track name (Refer OI page 47)
	Music Shuffle Tracks are automatically selected from the Music Shuffle collection playlist (Refer OI page 49).
	Other Playlists Search from various user-specific playlists (Refer OI page 48)
	Random Shuffle Tracks will be randomly selected and played (Refer OI page 49).

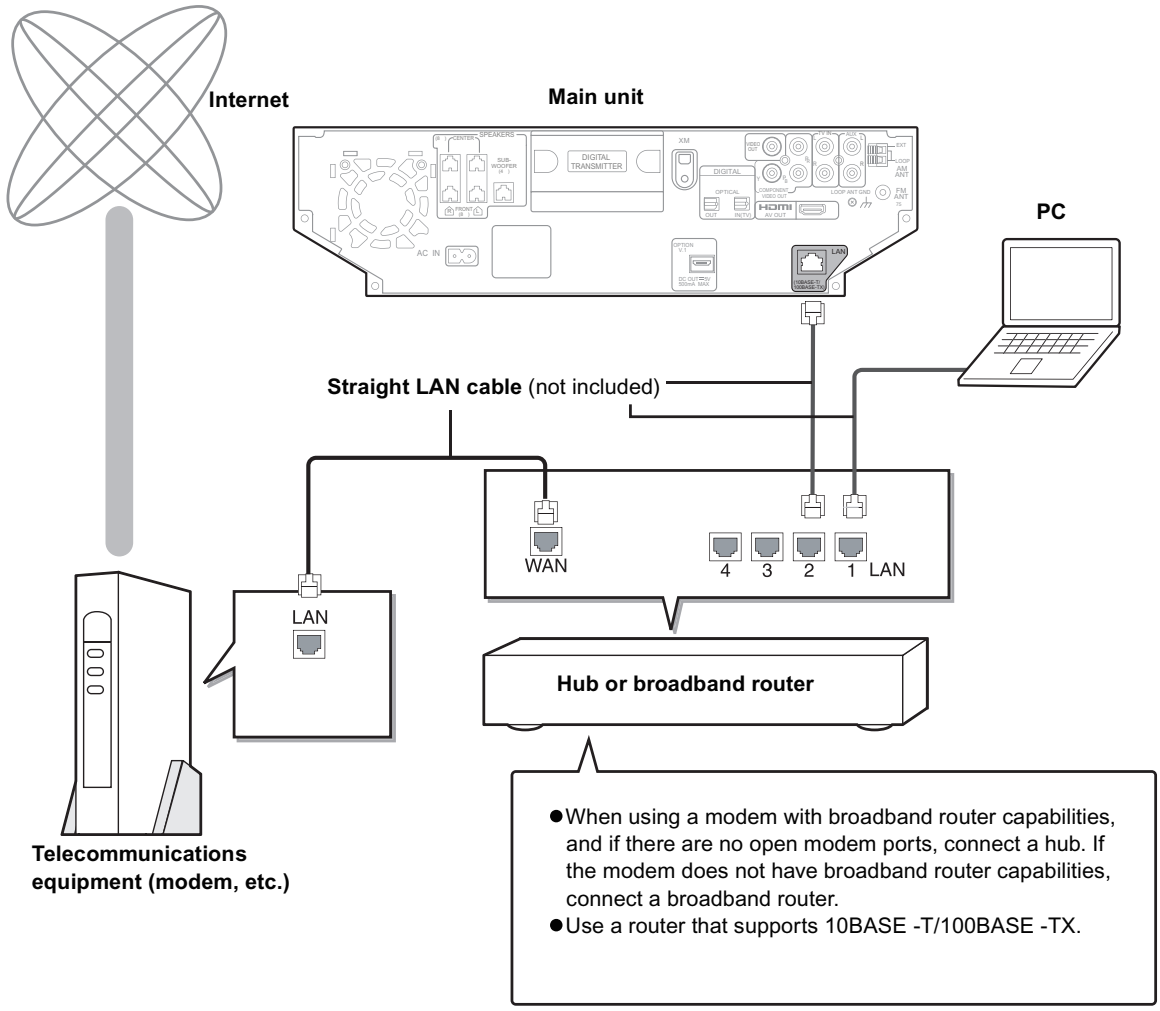
9.3. Network Connections (LAN)

9.3.1. Network Connections

By connecting to the Internet, you can use the following functions:

- You can obtain the most recent CD title information from the online Gracenote® database.
  [This unit has an abbreviated Gracenote® database in the HDD. CD title information can be obtained even if you are not connected to the Internet. (➜ OI page 31, About the Gracenote® database)].
- Importing WMA/MP3 data (➜ OI page 40), data backup (➜ OI page 88), etc., are all functions that use the network.
  (Functions other than those listed above are not supported by network services.)

When you have a dedicated Internet connection (such as cable, broadband, etc.), after checking with your Internet Service Provider (ISP) and the service agreement, make connections and settings using indicated equipment.
For further information about network connection visit the following homepage.
http://panasonic.jp/support/global/cs/audio


Internet
Main unit
PC
Straight LAN cable (not included)
WAN
4 3 2 1 LAN
LAN
Hub or broadband router
Telecommunications equipment (modem, etc.)
● When using a modem with broadband router capabilities, and if there are no open modem ports, connect a hub. If the modem does not have broadband router capabilities, connect a broadband router.
● Use a router that supports 10BASE -T/100BASE -TX.

Note

- The name for the terminal may differ depending on the device.
- Refer to the operating instructions for the connected device.
- Inserting any cable other than a LAN cable in the LAN terminal can damage the unit.

■ *Router settings*

- We recommend setting the DHCP for the router to "ON" (the setting to automatically assign IP addresses). This is usually set to "ON", therefore changes may be unnecessary.
- Depending on the security settings of the router, this unit may not be able to connect to the Internet.

■ *Settings for this unit*

- When the DHCP server function is set to "ON", you can use the default settings for this unit; no changes to the settings are necessary.
- Depending on the router settings, you may need to make changes to the network settings on this unit.

Note

CD title information cannot be obtained from the online Gracenote® database if you connect to the Internet using a Proxy connection.

■ *Responsibility disclaimer*

- Panasonic will not accept responsibility for unintended consequences, malfunctions, hang-ups, or other damage resulting from connections of unapproved devices or software.
- Implementing router security requires a high level of knowledge of networking. If you are setting security levels, do so at your own risk. Panasonic accepts no responsibility for problems caused by security settings. Furthermore, Panasonic cannot address questions relating to the settings and usage of each device.

9.3.2. Importing WMA/MP3 from a PC

WMA **MP3**

With a network connection (LAN home network), you can save WMA/MP3 data from your PC in the HDD of this unit.
You can import recordings without any audio distortion or degradation.

- Supported OS: Windows XP SP2
- File formats that can be imported
  - extensions: WMA,MP3
    - MP3 files in compliance with MP3 standards
    - MPEG-1 Audio Layer III
    - MPEG-2 Audio Layer III (LSF)
  - compatible bitrate: 32 kbps to 192 kbps
  - files without copyright restrictions
- Tracks can also be Imported from NAS (Network Attached Storage).

Preparation

1 Connect this unit and the PC to the network (➔ OI page 20), or connect this unit and the PC directly (➔ OI page 90).
2 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.
3 Press [⏻].
4 Press [MUSIC COLLECTION] to switch the selector to "Music Collection".

Preparations and items to check on the PC

1 Set the "Shared Folder" (→ OI page 41,Setting the "Shared Folder"), and move the folder containing WMA/MP3 files to the "Shared Folder", or move the folder containing WMA/MP3 files to the "Shared Documents" folder.
   - It is necessary to name the PC and the PC Shared Folder using only characters that can be used on this unit. If necessary, make changes to the "Shared Name" and "Full Computer Name" on the PC.

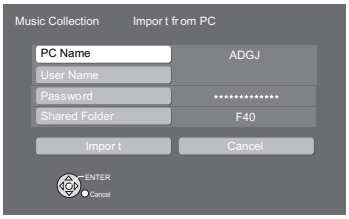
2 Checking the PC name (Computer name).
e.g., For "Windows XP Home Edition"
From the "Start" menu, select "System" in "Control Panel", and click on the "Computer Name" tab, and make note of the name given in the "Full Computer Name" field.

Main unit operations

From the Main Screen (➔ OI page 30)

1 Press [SUB MENU].

2 Press [▲ ▼] to select "Import from PC" and press [ENTER].



3 Press [▲ ▼] to select "PC Name" and press [ENTER].

4 Enter the PC name (➔ OI page 69) and press [■] (Set).

- Enter the name that you checked in step 2 of "Preparations and items to check on the PC" (➔ left) (Up to 15 characters).

If the PC name, etc. is displayed
If you have previously imported data or performed a backup (➔ OI page 87), then PC name, etc. may be displayed. In this case, check the PC name and make any changes that may be necessary.

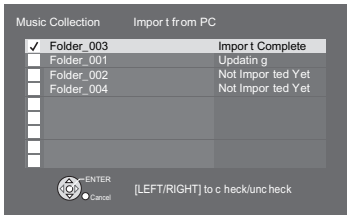
5 Repeat steps 3 and 4 and enter other items.

User Name: The user account name used when Windows XP was registered.
Password: Password set for the user name
- Passwords will be displayed as " ********** ".

Shared Folder: Name of the shared folder on the PC.

6 Press [▲ ▼ ◀ ▶] to select "Import" and press [ENTER].

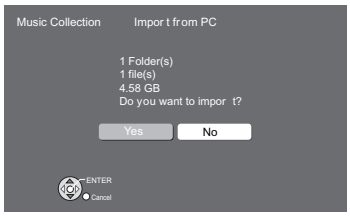
The list inside the shared folder on the PC will be displayed.



7 Select the folder to be imported with [▲ ▼] and add a check mark with [◀ ▶].

To select all the folders
Press [SUB MENU] and select "Mark All".
- To remove the check marks from all the folders, select "Unmark All".

8 Press [ENTER].



9 Press [◀ ▶] to select "Yes" and press [ENTER].

Import starts and the current status and remaining time is displayed. After importing is finished, the status message appears.
- If import does not start, refer to "Messages" (→ OI page 98) to address to any problems.

To stop importing
Press [■].
Tracks that finished importing up to the point stopped can be recorded.

To return to the previous screen
Press [RETURN].

Note

- When the unit is set to standby mode, this unit performs analysis of WMA/MP3 tracks imported to the HDD for Music Shuffle (→ OI page 49). AAC conversion is not performed for the WMA/MP3 tracks imported from a PC.
- Tracks that have not been analyzed will appear in the playlist screen with a " " mark next to them.
- The audio may sound broken up in the space between tracks imported from a PC.
- If a track contains large data such as JPEG, etc., the track may be muted or not play at all.
- When using NAS (Network Attached Storage), input the user name and password registered with NAS (→ OI page 40, step 5).

Tips

How titles are added
If the music data on the PC uses music information tags, the artist name, album name, and track titles will be added.
If there is no tag information, the names of the artist, album and track are added as shown below.

Artist name: "_Unknown Artist"
Album name: The folder s name of the recorded track
Track name: The file name of the track

About WMA/MP3 data imported to this unit:
Operations for tracks imported from a PC will play and edit (excluding Combine/Divide functions), etc. in the same manner as tracks recorded to the HDD in this unit.

Setting the "Shared Folder"

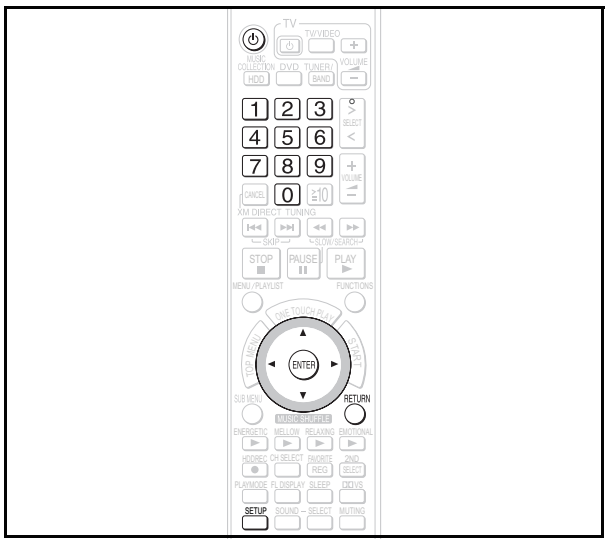
For further information, refer to the Windows operating instructions or Windows "Help".

e.g., For "Windows XP Home Edition"

1 **Right click on the folder that you want to share, and select "Sharing and Security...".**
2 **Add check marks to "Share this folder on the network" and "Allow network users to make changes to files".**
3 **Make note of the "Shared Name" field. (Necessary for later operations.)**
4 **Click "OK".**

Depending on the PC, stability issues may cause problems such as tracks to fail to import, or imported tracks may be unusable, etc. Panasonic and/or its retailer s responsibility are limited to gross negligence or malicious intent by Panasonic and/or its retailers. Neither Panasonic nor its retailers will accept any responsibility for direct or indirect loss or damage to your music data.

9.3.3. Changing the Network Settings



These settings are used if you will connect this unit to a network.

Preparation

1 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.
2 Press [⏻].

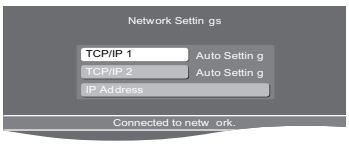
Common procedures

1 Press [SETUP].

2 Press [▲ ▼] to select "Other Setup" and press [ENTER].

3 Press [▲ ▼] to select "Network" and press [▶].

4 Press [▲ ▼] to select "Network Settings" and press [ENTER].
The network connection status is displayed.



Manually setting the IP address

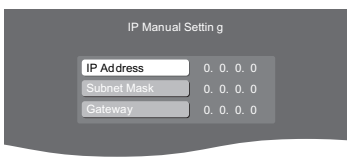
In most cases, default settings can normally be used without making any changes.
When connecting this unit to a network and assigning a fixed IP address, perform the following settings.

After performing steps 1–4 (➜ above)

5 Press [▲ ▼] to select "TCP/IP 1" and press [ENTER].

6 Press [▲ ▼] to select "IP Manual Setting" and press [ENTER].

7 Press [▲ ▼] to select the item to be set and press [ENTER].



8 Enter numbers with the numbered buttons and press [ENTER].
- After checking the specifications for your broadband router, enter each number.
- The numeric input range is between 0 and 255.

Repeat steps 7–8, and enter numbers for other items.

To return to the previous screen
Press [RETURN].

To exit the screen
Press [RETURN] several times.

If you made an input mistake
Move the cursor with [◀ ▶] and make corrections with the numbered buttons.

To delete settings and use default settings
Select "IP Auto Setting" in step 6 and press [ENTER].

Manually setting the DNS server

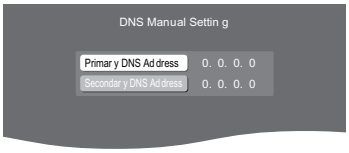
In most cases, default settings can normally be used without making any changes.
When setting an assigned DNS server from your ISP, perform the following settings.

After performing steps 1–4 (➜ left)

5 Press [▲ ▼] to select "TCP/IP 2" and press [ENTER].

6 Press [▲ ▼] to select "DNS Manual Setting" and press [ENTER].
- If "TCP/IP 1" is set to "IP Manual Setting", the "DNS Auto Setting" will not be displayed.

7 Press [▲ ▼] to select the item to be set and press [ENTER].



8 Enter numbers with the numbered buttons and press [ENTER].
- Follow the instructions given by your ISP and enter the numbers.
- The numeric input range is between 0 and 255.

Repeat steps 7–8, and enter numbers for other items.

To return to the previous screen
Press [RETURN].

To exit the screen
Press [RETURN] several times.

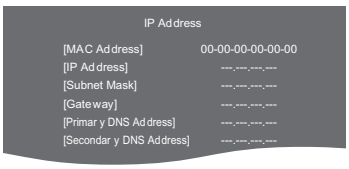
If you made an input mistake
Move the cursor with [◀ ▶] and make corrections with the numbered buttons.

To delete settings and use default settings
Select "DNS Auto Setting" in step 6 and press [ENTER].

To check the IP Address, etc.

After performing steps 1–4 (➜ left)

5 Press [▲ ▼] to select "IP Address" and press [ENTER].



To return to the previous screen
Press [RETURN].

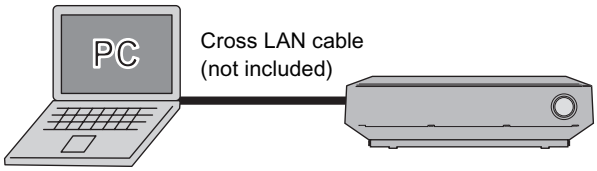
To exit the screen
Press [RETURN] several times.

9.3.4. Connection Setting

When importing WMA/MP3 data (→ OI page 40), creating a backup (→ OI page 88), or restoring backed up data (→ OI page 89), you can connect this unit directly to your PC with a cross LAN cable. When using this connection method, changes to the settings on this unit and your PC are necessary.

Preparation

1 Connect this unit to the PC with a cross LAN cable (not included).
2 To display the picture turn on the television and select the appropriate video input to suit the connections to this unit.
3 Press [⏻].



To LAN terminal (100BASE-T or greater)

To LAN terminal (10/100)

Settings on this unit

1 Press [SETUP].

2 Press [▲ ▼] to select "Other Setup" and press [ENTER].

3 Press [▲ ▼] to select "Network" and press [▶].

4 Press [▲ ▼] to select "Network Settings" and press [ENTER].

5 Press [▲ ▼] to select "TCP/IP 1" and press [ENTER].

6 Press [▲ ▼] to select "IP Manual Setting" and press [ENTER].
Set "IP Address", "Subnet Mask", and "Gateway".

Settings on the PC

For further information, refer to the operating instructions for your PC. These instructions are the examples of operating a PC with Windows XP operating system.

1 "Control Panel" > "Network Connections" > "Local Area Connections", then click on "Properties".

2 Click on "Properties" in "Internet Protocol (TCP/IP)".

3 Select "Use the following IP address" and set the IP address and subnet mask.

Note

- Connecting this unit to a PC in the manner described above may result in temporary loss of Internet connection. When using the Internet, change all the settings listed above back to the previous settings. You can also use the connection method described in "Network connection" (→ page 20).

Tips

- To make sure that you can reconnect to a network, we recommend taking note of the network setting values used (IP addresses, Gateway, etc.) before changing any network settings and/or values.

9.4. Operating iPod with this Unit

By inserting the Universal Dock for iPod (included) into the OPTION port on the back of this unit, you can charge and play or record tracks from a connected iPod.

- **You can enjoy higher audio quality when audio tracks from iPod are output through this unit's speakers.**
- **You can perform basic functions on iPod with this unit's remote control.**
- **You can record tracks from iPod to this unit's HDD.**
- **You can recharge iPod.**

9.4.1. Connecting the Universal Dock for iPod

Before connecting, turn off the power to iPod.

1 **Insert the dock adapter (included) into the Universal Dock for iPod.**

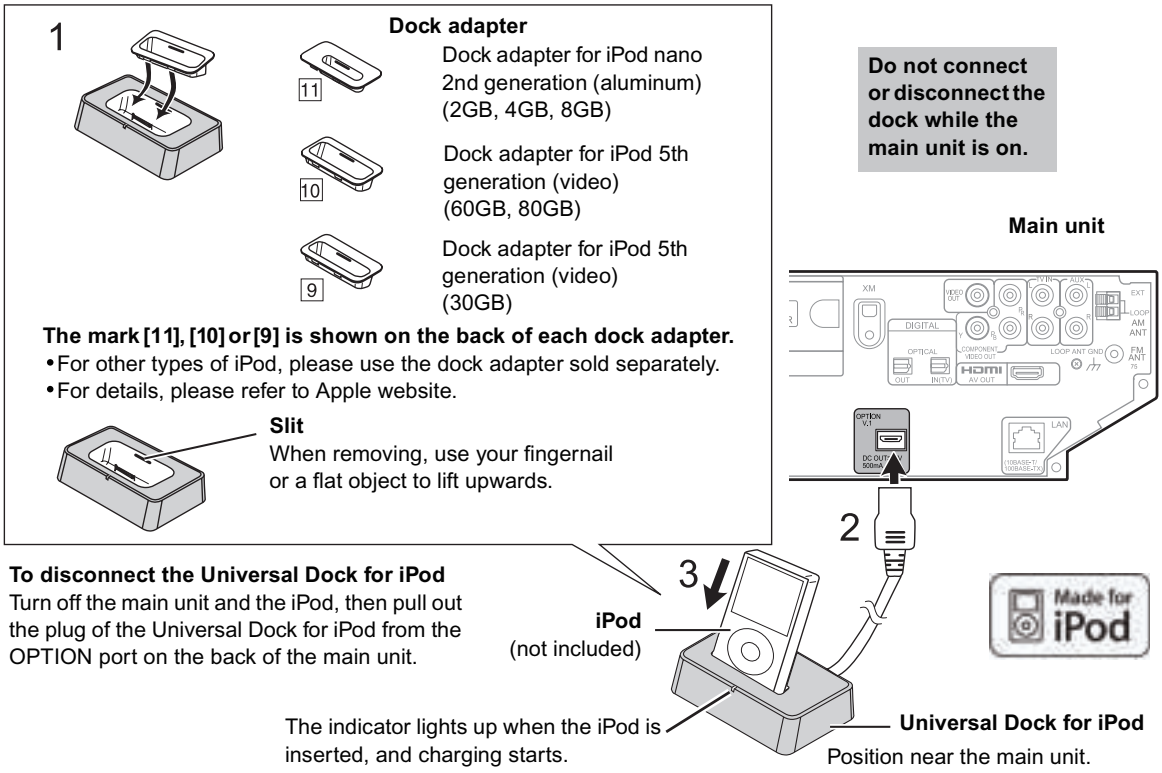
2 **Insert the Universal Dock for iPod into the OPTION port on the back of this unit.**

3 **Connect iPod to the Universal Dock for iPod.**

[Note]

- Make sure that the volume level of this unit is set to minimum.
- Do not twist your iPod when inserting it or taking it off from this universal dock, and be careful not to knock over this universal dock when your iPod is inserted.

Once connected, recharging begins (➞below). Refer to Section 8.6 "Using the iPod" for information about recording and play.


1
Dock adapter
11
Dock adapter for iPod nano 2nd generation (aluminum) (2GB, 4GB, 8GB)
10
Dock adapter for iPod 5th generation (video) (60GB, 80GB)
9
Dock adapter for iPod 5th generation (video) (30GB)
The mark [11], [10] or [9] is shown on the back of each dock adapter.
• For other types of iPod, please use the dock adapter sold separately.
• For details, please refer to Apple website.
Slit
When removing, use your fingernail or a flat object to lift upwards.
Do not connect or disconnect the dock while the main unit is on.
Main unit
2
3
iPod
(not included)
Made for iPod
To disconnect the Universal Dock for iPod
Turn off the main unit and the iPod, then pull out the plug of the Universal Dock for iPod from the OPTION port on the back of the main unit.
The indicator lights up when the iPod is inserted, and charging starts.
Universal Dock for iPod
Position near the main unit.

9.4.2. About Recharging the Battery

■ *About recharging the battery*

By inserting the Universal Dock for iPod to the OPTION port on the back of this unit and connecting iPod, you can recharge iPod.

Charging time

iPod nano 2nd generation (aluminum) iPod 5th generation (video) iPod nano 1st generation	Until iPod is fully charged
iPod 4th generation (color display) iPod 4th generation iPod mini	5 hours (fixed)

Once connected, the battery will begin to recharge automatically.

iPod will start recharging regardless of whether this unit is on or off.

Check iPod to see if the battery is fully recharged.

[Note]

- Tracks from this unit cannot be transferred to iPod using the Universal Dock for iPod.
- AC cord must be connected with the main unit.
- Compatibility depends on the software version of your iPod.
- If you are not using iPod for an extended period of time after recharging has completed, disconnect it from the Universal Dock for iPod, as the battery will be depleted naturally. (Once fully recharged, additional recharging will not occur.)

For more information, refer to the operating instructions for iPod.

10 Self-Diagnosis and Special Mode Setting

10.1. Service Mode Summary Table

The service modes can be activated by pressing various button combination on the main unit and remote control unit.

Below is the summary for the various modes for checking:

Player buttons	Remote control unit buttons	Application	Note
STOP	[0]+[≧10]	Service mode entering.	(Refer to the section "10.2.1. Service Mode Table 1" for more information.)
In Service Mode	[1]	Self-diagnostic error code.	
	[2]	Firmware version for the micro-processor.	
	[4]	Accumulated time for the unit in power-up.	(Refer to the section "10.2.2. Service Mode Table 2" for more information.)
	[3]	Cold start of the unit.	
STOP	[HDD REC]+[ENERGETIC]	Reliability Test 1. (Open/Close check)	(Refer to the section "10.2.3. Service Mode Table 3" for more information.)
	[HDD REC]+[MELLOW]	Reliability Test 2. (Playability check)	
	[HDD REC]+[RELAXING]	Reliability Test 3. (CD to HDD high speed recording)	
	[5]	Jitter checking.	(Refer to the section "10.2.4. Service Mode Table 4" for more information.)
	[6]	Region display and mode.	
	[7]	Micro-processor firmware version check.	
	[0]	Error code check.	
	[PAUSE]	Initial setting of laser drive current.	(Refer to the section "10.2.5. Service Mode Table 5" for more information.)
	[FL DISPLAY]	DVD laser drive current check.	
	[≧10]	Initialization of the player (factory setting is restored). Used after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) and DVD Module P.C.B.	
	[ENTER]	DVD Module P.C.B. reset.	
	[4]	Device check.	
	[3]	CD laser drive current check.	(Refer to the section "10.2.6. Service Mode Table 6" for more information.)
	[8]	DVD Module P.C.B. firmware version check.	
	[MENU]	Communication error display.	
	[▲]	Timer 1 check.	(Refer to the section "10.2.7. Service Mode Table 7" for more information.)
	[▼]	Timer 1 reset.	
	[▶]	Timer 2 check.	
	[◀]	Timer 2 reset.	

Note:

An error code will be canceled if a power supply is turned OFF.

*1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.

*2: CEC is the consumer electronic control used for high-level user control of HDMI-connected devices.

*3: HDCP is the specification developed to control digital audio & video contents transmission for DVI or HDMI connections.

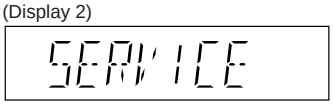
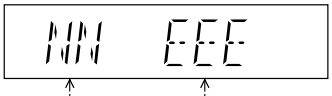
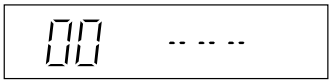
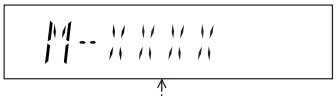
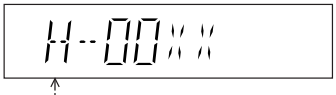
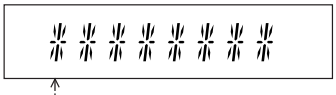
10.2. Service Mode Table (Main Unit)

By pressing various button combinations on the main unit and remote control unit, you can activate the various service modes for checking.

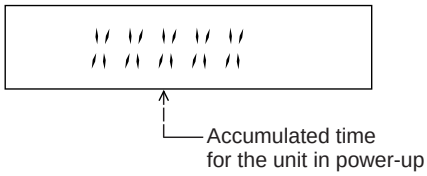
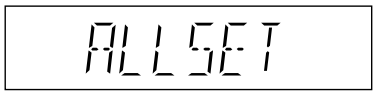
Special Note:

- Due to the limitations of the no. characters that can be shown on the FL Display, the "FL Display" button on the remote control unit can be used to show the two display pages. (Display 1 / Display 2).
- Refer to Section 8.1 for the section on "Remote Control Key Buttons Operations".

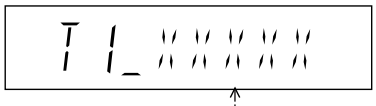
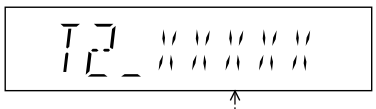
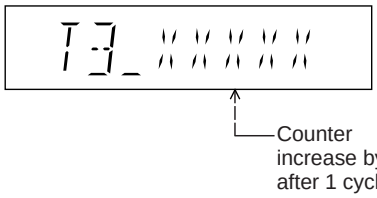
10.2.1. Service Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Service mode entering	To enter into service mode.	(Display 1) (Display 2)  	In STOP (no disc) mode, select DVD/CD and press [STOP] button on the main unit, followed by [≧10] button and [0] button on the remote control unit.
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed. Note: Refer to "Section 10.7. DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.	 Error code record — Error code no. By pressing the up/down key on the remote control. You can view the next or previous error codes present. When there is no error present, the FL display shows as below:  	In SERVICE mode, press [1] button on the remote control unit. Error code will be shown on the FL Display. To clear the error code, press [0] for 5 seconds or more. To exit, press [POWER] button on main unit or remote control.
Micro-processor firmware version display & EEPROM checksum display.	Micro-processor firmware version display & EEPROM checksum display. EEPROM checksum is only available due to existence of EEPROM IC. FL Display sequence: Display 1➞2➞3➞4➞5➞6➞7.	(Display 1)  Main micro-processor firmware version no. (Display 2) Sub micro-processor IC (Digital P.C.B.) firmware version no. for YYY. ZZ is for the checksum no. if EEPROM IC is present. (Display 3) Kernel firmware version (Display 4) Miniboot version no. (Display 5)  Fs version no. (Display 6) DSP MICRO-PROCESSOR IC FIRMWARE VERSION (Display 7)  Misty key no.	In SERVICE mode, press [2] button on the remote control unit. Press [FL Display] button on remote control unit for next page. (FL Display) To exit, press [POWER] button on main unit or remote control.

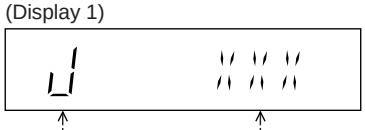
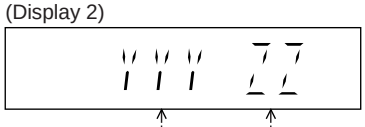
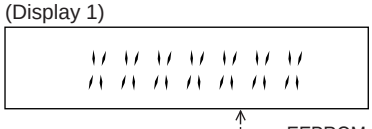
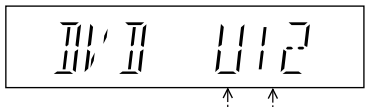
10.2.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Accumulated time for the unit in power-up	To check for the accumulated time the player is in its power-up state.		In SERVICE mode, press [4] button on on the remote control unit. To exit, press [POWER] button on main unit or remote control.
Cold start of unit	After power-up, the FL display will light up when any key buttons is pressed.		In SERVICE mode, press [3] button on on the remote control unit. To exit, press [POWER] button on main unit or remote control.

10.2.3. Service Mode Table 3

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Reliability Test 1	Reliability Test 1 for Mechanism Open/Close Tray. The cycle begins with tray open, follows by close and TOC. Counter increments by 1.		In STOP (no disc) mode, press [HDD REC] button, followed by [ENERGETIC] button on the remote control unit. To exit, press [POWER] button on main unit or remote control.
Reliability Test 2	Reliability Test 2 for playability checking.	First track is played. 	In STOP mode with disc inserted, press [HDD REC] button, followed by [MELLOW] button on the remote control unit. To exit, press [POWER] button on main unit or remote control.
Reliability Test 3	Reliability test 3 for CD to HDD high speed recording.	(Display 1)  (Display 2) 	In STOP (no disc), press [HDD REC] button, followed by [RELAXING] button on the remote control unit. To exit, press [POWER] button on main unit or remote control.

10.2.4. Service Mode Table 4

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Jitter check	Jitter check. Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more. FL Display sequence: Display 1→2.	(Display 1)  Jitter check mode Jitter rate Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation. (Display 2)  Lead Error Counter Focus Drive Value	In STOP (no disc) mode, press [STOP] button on the main unit, and [5] button on the remote control unit. Press [POWER] button to exit. Press [FL Display] on remote control unit for next page (FL Display).
Region display	Region code display, TV broadcasting system & the model no. information. Note: Refer to Figure 2 for "Video Design Information".	 Model No. Information N: NTSC / 6: PAL60 N: no PAL / P: PAL Region No.: 0-8	In STOP (no disc) mode, press [STOP] button on the main unit, and [6] button on the remote control unit. Cancelled automatically 5 seconds later.
Micro-processor firmware version display & EEPROM checksum display.	Micro-processor firmware version display & EEPROM checksum display. EEPROM checksum is only available due to existence of EEPROM IC.	(Display 1)  EEPROM Checksum (If applicable, refer below.)	In STOP (no disc) mode, press [STOP] button on the main unit, and [7] button on the remote control unit. Cancelled automatically 5 seconds later.
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed. Note: Refer to "Section 10.7 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.	 Error Code U / H / F (Error Type) Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: DVDnn U12 Error code = 0 x DBXX is expressed: DVDnn H12 Error code = 0 x DXXX is expressed: DVDnn F123 Error code = 0 x 0000 is expressed: DVDnn F--- * "xx" denotes the error code	In STOP (no disc) mode, press [STOP] button on the main unit, and [0] button on the remote control unit. * With pointing of cursor up and down on display. Cancelled automatically 5 seconds later. To exit, press [POWER] button on main unit or remote control.

Model Series	Country Region	Region Code	TV Broadcasting System	Product		
				Signal System (Default)	Region Display (Default)	OSD Menu Language
P, PC, PX	USA, Canada, PX	1	NTSC	NTSC (*A)	1PN	English, Spanish, Canadian French
(S)	Japan	2	NTSC	NTSC (*A)	2PN	Japanese, English
E	Europe	2	PAL	PAL (*C)	2P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
EB, EG	Europe	2	PAL	PAL (*C)	2P6	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
GC, GS	Middle East	2	PAL	PAL (*C)	2P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GCS, GD, GT, GCT	South East Asia, Korea, Taiwan	3	PAL NTSC	NTSC (*B)	3PN	English, Traditional Chinese
GN	New Zealand, Australia	4	PAL	PAL (*C)	4P6	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
PL, GCP, LB	Central/South/ Latin America	4	NTSC	NTSC (*D)	4PN	English, Spanish, French, Brazilian Portuguese
EE	CIS	5	SECAM	PAL (*C)	5P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GK	China	6	PAL	NTSC (*B)	6PN	English, Simplified Chinese

NTSC (*A)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	PAL (DVD-V)
	NTSC (DVD-A/VCD)

NTSC (*B)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC (default)
	PAL60
PAL disc	PAL60

PAL (*C)

Source	Output
Screen Saver	PAL
NTSC disc	PAL60 (default)
	NTSC
PAL disc	PAL

NTSC (*D)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	NTSC

Explanation of Display

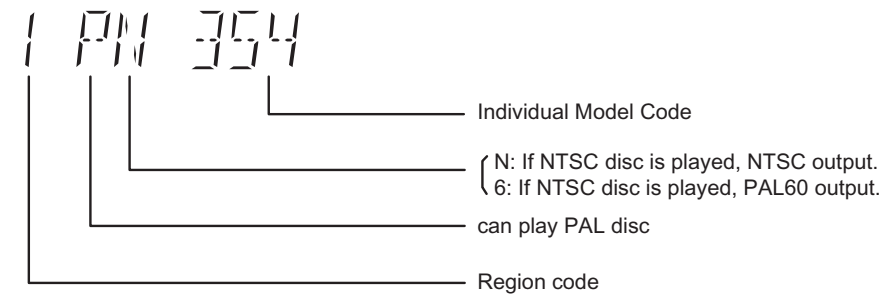
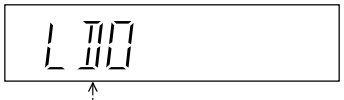
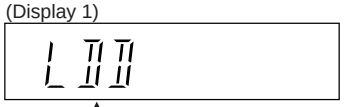
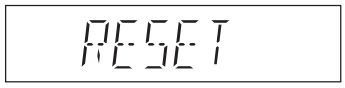
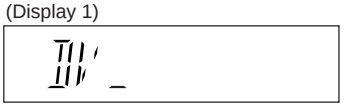
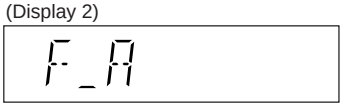
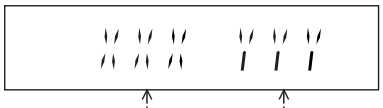
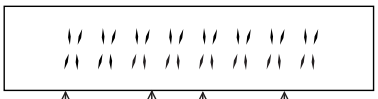
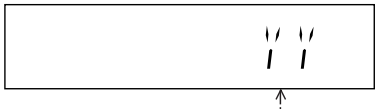

1 PN 3S4
Individual Model Code
N: If NTSC disc is played, NTSC output.
6: If NTSC disc is played, PAL60 output.
can play PAL disc
Region code

Figure 2 Video Design Information

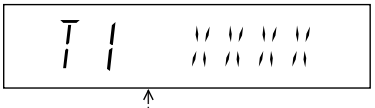
10.2.5. Service Mode Table 5

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Initial setting of laser drive current	Initial setting of laser drive current. Initial current value for the DVD laser and CD laser is separately saved in the EEPROM IC. FL Display sequence: Display 1→2.	(Display 1)  Laser current measurement mode The value denotes the current in decimal notation. (Display 2) CD Laser DVD Laser The above example shows the initial current is XXXmA and YYYmA for CD laser and DVD laser respectively when the laser is switched on.	In STOP (no disc) mode, press [STOP] button on the main unit, and [PAUSE] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of laser drive current.
DVD laser drive current measurement	DVD laser drive current measurement. DVD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1)  DVD laser current measurement mode The value denotes the current in decimal notation. (Display 2) DVD Laser Initial Value DVD Laser Value The above example shows the initial current is XXXmA and the measured value is YYYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [FL DISPLAY] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of dvd drive current.
Initialization	Initialization. User settings are cancelled and player is initialized to factory setting. It is necessary when after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) & DVD Module P.C.B.		In STOP (no disc) mode, press [STOP] button on the main unit, and [≧10] button on the remote control unit. Cancelled automatically 5 seconds later.
DVD Module P.C.B. Reset	To reset DVD Module P.C.B. This process is used when the DVD Module P.C.B. or FLASH ROM IC is replaced with a new one.		While in initialization mode, press & hold [STOP] button on the main unit, follow by [ENTER] button on the remote control unit. Cancelled automatically 5 seconds later.
Device check	To check the device.	(Display 1)  (Display 2) 	In STOP (no disc) mode, press [STOP] button on the main unit, and [4] button on the remote control unit. Cancelled automatically 5 seconds later.

10.2.6. Service Mode Table 6

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD laser drive current measurement	CD laser drive current measurement. CD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1) CD laser current measurement mode The value denotes the current in decimal notation. (Display 2)  CD laser initial value CD laser value The above example shows the initial current is 0XXmA and the measured value is 0YYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [3] button on the remote control unit. To exit, press [POWER] button. Press [FL Display] on remote control unit for next page. (FL Display)
DVD Module P.C.B. firmware version display	DVD Module P.C.B. firmware version is displayed on the FL Display. The firmware version can be updated using recovery disc. Note: It is necessary to check for firmware version before carrying out the version up using the disc.	 System controller version Destination System controller generation Region No.: 0-8	In STOP (no disc) mode, press [STOP] button on the main unit, and [8] button on the remote control unit. Cancelled automatically 5 seconds later.
Communication error display	Displays frequency of communication errors between system control IC and mechanism control IC in the DVD Module P.C.B. FL Display sequence: Display 1→2.	(Display 1) No. of communication error (Display 2)  No. of communication	In STOP (no disc) mode, press [STOP] button on the main unit, and [MENU] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display).

10.2.7. Service Mode Table 7

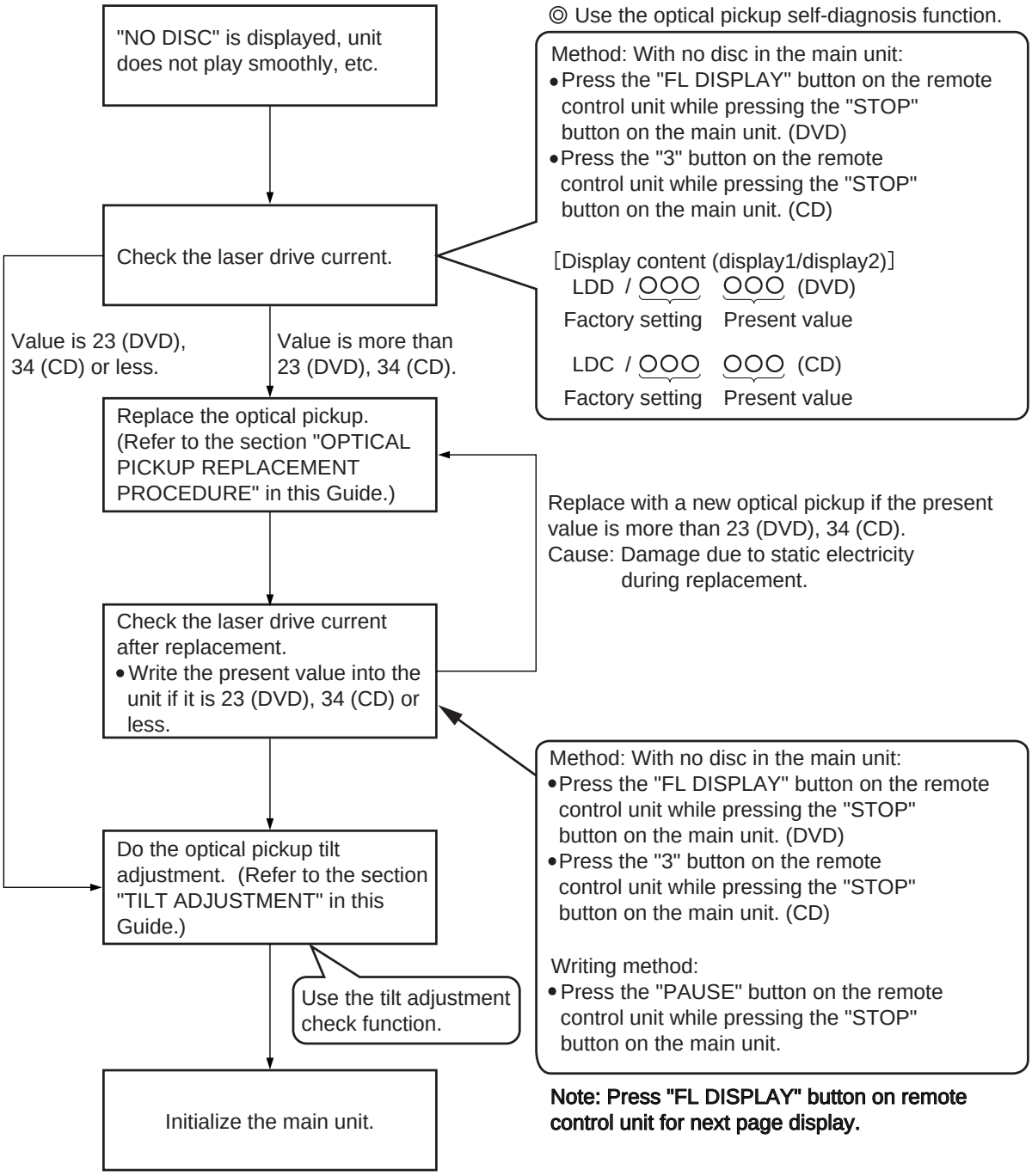
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Timer 1 check	Timer 1 check Laser operation timer is measured separately for DVD laser and CD laser. FL Display sequence: Display 1→2.	(Display 1)  DVD laser usage time Shown to the above is DVD laser usage time, and to the below is CD laser usage time. Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999". (DVD laser) (Display 2) CD laser usage time Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999". (CD laser)	In STOP (no disc) mode, press [STOP] button on the main unit, and [▲] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] button for next page of FL Display.
Timer 1 reset	Timer 1 reset Laser operation timer of both DVD laser and CD laser is reset all at once.	 Time is shown in 4 digits of decimal notation in a unit of 10 hours. It will clear to "0000" upon reset.	While displaying Timer 1 data, press [STOP] button on the main unit, and [▼] button on the remote control unit. Cancelled automatically 5 seconds later
Timer 2 check	Timer 2 check Spindle motor operation timer	 Time is shown in 4 digits of decimal notation in a unit of 1 hour. "0000" will follow "9999".	In STOP (no disc) mode, press [STOP] button on the main unit, and [▶] button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 2 reset	Timer 2 reset Spindle motor operation timer	 Time is shown in 4 digits of decimal notation in a unit of 1 hour. It will be cleared to "0000" upon activating this.	While displaying Timer 2 data, press [STOP] button on the main unit, and [◀] button on the remote control unit. Cancelled automatically 5 seconds later.

10.2.8. Optical Pick-up Self-Diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than the specified value.

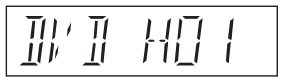
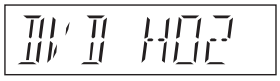
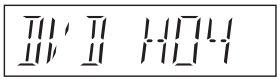
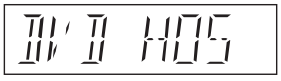
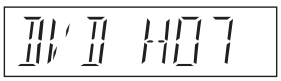
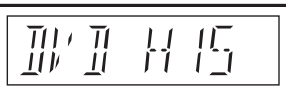
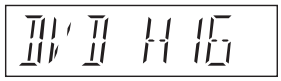
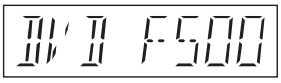
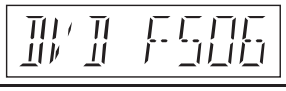
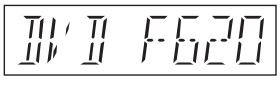
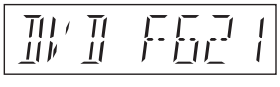
Note:

Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)

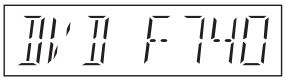
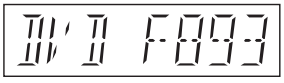
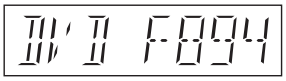
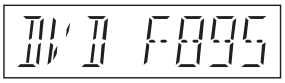
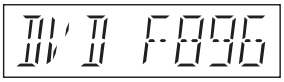
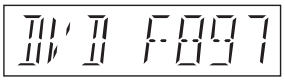
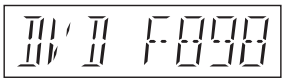
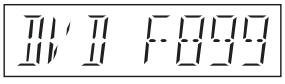

"NO DISC" is displayed, unit does not play smoothly, etc.
Check the laser drive current.
Value is 23 (DVD), 34 (CD) or less.
Value is more than 23 (DVD), 34 (CD).
Replace the optical pickup. (Refer to the section "OPTICAL PICKUP REPLACEMENT PROCEDURE" in this Guide.)
Check the laser drive current after replacement.
• Write the present value into the unit if it is 23 (DVD), 34 (CD) or less.
Do the optical pickup tilt adjustment. (Refer to the section "TILT ADJUSTMENT" in this Guide.)
Use the tilt adjustment check function.
Initialize the main unit.
◎ Use the optical pickup self-diagnosis function.
Method: With no disc in the main unit:
• Press the "FL DISPLAY" button on the remote control unit while pressing the "STOP" button on the main unit. (DVD)
• Press the "3" button on the remote control unit while pressing the "STOP" button on the main unit. (CD)
[Display content (display1/display2)]
LDD / ○○○ ○○○ (DVD)
Factory setting Present value
LDC / ○○○ ○○○ (CD)
Factory setting Present value
Replace with a new optical pickup if the present value is more than 23 (DVD), 34 (CD).
Cause: Damage due to static electricity during replacement.
Method: With no disc in the main unit:
• Press the "FL DISPLAY" button on the remote control unit while pressing the "STOP" button on the main unit. (DVD)
• Press the "3" button on the remote control unit while pressing the "STOP" button on the main unit. (CD)
Writing method:
• Press the "PAUSE" button on the remote control unit while pressing the "STOP" button on the main unit.
Note: Press "FL DISPLAY" button on remote control unit for next page display.

10.3. DVD Self Diagnostic Function-Error Code

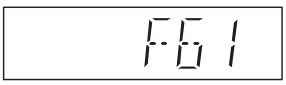
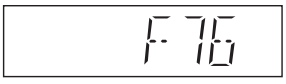
10.3.1. Mechanism Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
H01	Tray loading error	The tray opening and closing is abnormal. CLOSE and OPEN of the tray cannot be carried out properly. Loading motor error, DV5 LSI IC (IC8001) error.		Press [■ STOP] on main unit for next error. (OPEN time: OPEN→ CLOSE→OPEN→ H01 at CLOSE: CLOSE →OPEN→CLOSE→ H01)
H02	Spindle servo error	The spindle servo/motor is abnormal. The FG pulse is abnormal. CLV servo error.		Press [■ STOP] on main unit for next error.
H03	Traverse servo error	The traverse is abnormal. (Traverse servo, DV5 LSI IC (IC8001), TRV motor error.)		Press [■ STOP] on main unit for next error.
H04	Tracking servo error	Tracking coil NG (OPU unit abnormal), DV5 LSI IC (IC8001) error.		Press [■ STOP] on main unit for next error.
H05	Seek time out error	It is not possible to access the disc. TOC cannot read. Abnormal disc etc. Pickup abnormal or disk is dirty. (TRV motor error, DV5 LSI IC (IC8001) error.)		Press [■ STOP] on main unit for next error.
H07	Driver IC thermal shut down	The spindle motor is abnormal. (short between brushes)		Press [■ STOP] on main unit for next error.
H15	Disc tray open detection switch failure	The disc tray cannot be opened & it closes spontaneously.		Press [■ STOP] on main unit for next error.
H16	Disc tray close detection switch failure	The disc tray cannot be closed & it opens spontaneously.		Press [■ STOP] on main unit for next error.
U11	Focus servo error	Focus coil, FE signal error. Disc may be dirty.		Press [■ STOP] on main unit for next error. (Unfinalized DVD-R is likely to beocme U11.)
U15	Unfinalized DVD-R			
F500	DSC error	DV5 LSI IC (IC8001) stops in the occurance of servo error (startup, focus error, etc)		Press [■ STOP] on main unit for next error.
F506	Invalid media	Disc is flipped over, TOC unreadable, incompatible disc.		Press [■ STOP] on main unit for next error.
F620	OPU unit abnormality temperature	Laser protection at high temperature.		Press [■ STOP] on main unit for next error.
F621	OPU unit circuitry temperature	Laser protection at circuit failure.		Press [■ STOP] on main unit for next error.

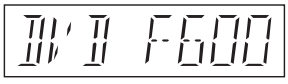
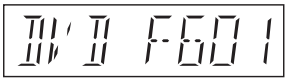
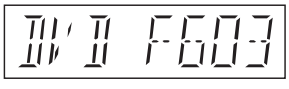
10.3.2. DVD Module Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
U702	HDMI/DVI I2C communication error	The communication error of I2C when connecting it with HDMI/ DVI. For instance, when EDID information to which information on the TV set side has been described cannot be read, it is generated.		Press [■ STOP] on main unit for next error.
U703	HDMI/DVI attestation error	When attestation (HDCP) with the TV side fails when connecting it with HDMI/DVI, it is generated.		Press [■ STOP] on main unit for next error.
U704	HDMI/DVI SRM Riborcerar	It is generated at the equipment to which the TV set is Riborced when connecting it with HDMI/DVI.		Press [■ STOP] on main unit for next error.
U705	HDMI/DVI SRM disk falsification check error	It is generated at the time of it is time when illegal the SRM data of the reproducing disk (verify error), when connecting it with HDMI/DVI.		Press [■ STOP] on main unit for next error.
F740	HDMI device key	I2C error when writing HDMI Key device into transmitter.		Press [■ STOP] on main unit for next error.
F893	FLASH ROM IC data falsification error	Firmware error, DV5 LSI IC (IC8651) error.		Press [■ STOP] on main unit for next error.
F894	EEPROM IC abnormality error	When failing in the access to EEPROM IC located in the DVD (HDMI) Module P.C.B. (IC8611)		Press [■ STOP] on main unit for next error.
F895	Language area abnormal	Firmware version agreement check for factory preset setting failure prevention.		Press [■ STOP] on main unit for next error.
F896	No existence model	Firmware version agreement check for factory preset setting failure prevention.		Press [■ STOP] on main unit for next error.
F897	Initialization error	Incomplete initialization after writing of new firmware (Factory preset setting failure prevention)		Press [■ STOP] on main unit for next error.
F898	Disagreement of hardware and software	Unsuitable combination of AV Decoder, SDRAM & FLASH ROM IC (firmware).		Press [■ STOP] on main unit for next error.
F899	The communication specification disagreement between micro-processor	Unsuitable combination of number of system com and panel com used. (Frimware)		Press [■ STOP] on main unit for next error.

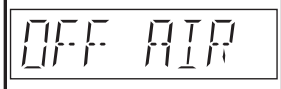
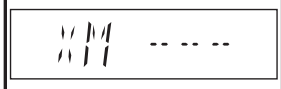
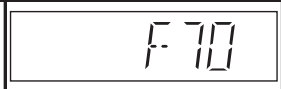
10.3.3. Power Supply Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	The abnormalities in an output or power supply circuit of POWER AMP	In normal operation, when DCDET2 goes to "L" (Low) (Not during POWER OFF condition), F61 appears on FL Display and PCONT goes to "L" (Low). This is due to speaker output has DC voltage or fan is not working.		Press [■ STOP] on main unit for next error.
F76	Abnormality in the output voltage of stabilized power supply	In normal operation when DCDET1 is detected "L" (Low) for two consecutive times, F76 is displayed on FL for 2 seconds and after that PCONT will be turned to "L" (Low). This is due to any of the DC voltages (+9V, +7V, -7V, +5V, +5.3V etc.) not available.		Press [■ STOP] on main unit for next error.
H19	Abnormality in the fan operation	When the fan motor stops operating during power-up at normal operation. After 1 seconds, the unit will automatically shutdown to standby mode after the error code appears on the FL display.		Press [■ STOP] on main unit for next error.
U59	Abnormality in the digital amp IC	When there is a detection of abnormality to the digital amp IC at time of normal operation. After 1 seconds, the unit will automatically shutdown to standby mode after the error code appears on the FL display.		Press [■ STOP] on main unit for next error.

10.3.4. ECC Error Code Table

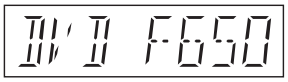
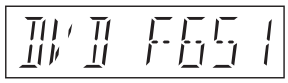
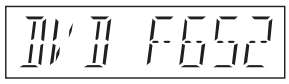
Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F600	Administrative information cannot be acquired by the recovery error.	It becomes impossible NaviPack etc. were done, and not to be able to acquire necessary information in the navigation's changing due to wound etc. of DISC, and to have done the reproduction transition.		Press [■ STOP] on main unit for next error.
F601	Irregular sector ID was demanded.	It tried to access the position that did not exist on DISC by the recording error etc. of authoring.		Press [■ STOP] on main unit for next error.
F603	KEYDET cannot be acquired by the recovery error.	The data for decoding copyright protection (CSS) cannot be acquired due to wound etc. of DISC, and it is not possible to reproduce.		Press [■ STOP] on main unit for next error.

10.3.5. XM Satellite Radio Code Table

Error Code	Diagnosis Contents	Description of Contents	Automatic FL Display	Remarks
XM RADIO	XM Radio Selection	It takes a short time for the XM radio to power up after selecting the sourceon the main unit. During this time, the FL display shows the message.Wait for a few seconds for the process to complete. If not, check on the XM antenna. if it is connected or damaged.	(Flashing)	
ANTENNA	XM connectivity	The XM antenna is not properly connected or the antenna cable is damaged.	(Flashing)	For more information, refer to operating instruction manual for connection of antenna.
UPDATING	XM Encryption Code	1) The XM antenna is being updated with the latest encryption code. (Wait for few seconds for the updating to be completed.) 2) The selected XM channel has been blocked, or isno longer available with the subscription package.	(Flashing)	
NO SIGNL	XM Signal receptivity	The XM Signal is too weak. Re-oriented the XM antenna for better reception.	(Flashing)	For more information, refer to operating instruction manual for optimizing the signal reception.
OFF AIR	XM Channel Broadcasting	The selected XM channel is not currently broadcasting information.	 (Flashing)	For more information, refer to operating instruction manual for selection of the channels.
XM ---	XM Channel Broadcasting	The selected XM channel is not available. Selection of a different channel.	 (Flashing)	For more information, refer to operating instruction manual for selection of the channels.
XM TRANSMISSION ERROR	XM Module Abnormality	The XM radio module is performing abnormally. Turn the main unit off and power on. The XM antenna may be defective.		

● **Special Note:** XM Satellite Radio ID is necessary for the activation of the XM Satellite Radio.

10.3.6. USB Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F650	USB device: Devices other than mass storage	Devices other than the mass storage class are connected.		Press [■ STOP] on main unit for next error.
F651	USB device: Non-Full Speed Device	The device that the transfer rate did not correspond to Full Speed was connected.		Press [■ STOP] on main unit for next error.
F652	USB device: Interface NG	The device in the interface (subclass) outside correspondence was connected. (correspondence interface) 001b: Reduced Block Commands (RBC) 010b: SFF-8020i. MMC-2 (ATAPI) 110b: SCSI transparent command set.		Press [■ STOP] on main unit for next error.
F655	USB device: Overcurrent detection	The overcurrent of 500mA or more was detected in VDD USB, and the USB device driver function was intercepted. (To intercept the current.)		Press [■ STOP] on main unit for next error.

10.4. Sales Demonstration Lock Function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

10.4.1. Setting

- **Prohibiting removal of disc (Lock mode A)**

1. Select the DVD/CD function.
2. At POWER ON condition, press the [POWER] button on the remote control for three seconds, followed by the ■ button on the main unit. (The message, "___LOCKED_" appears when the function is activated.)

Note:

OPEN/CLOSE ⏏ button is invalid and the player displays "___LOCKED_" while the lock function mode is entered.

- **Prohibiting operation of selector and disc (Lock mode B)**

1. Select the DVD/CD function.
2. At POWER ON condition, press the [POWER] button on the remote control for three seconds, followed by the ▶ button on the main unit. (The message, "___LOCKED_" appears when the function is activated.)
   – The selector change is prohibited in this mode.

Note:

1. The PLAY begins when the above-mentioned both enter the mode. It is likely to have to operate it with a cross key and the Play key in case of the disk that comes out the disc menu and stops.
2. The following buttons are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

Player	OPEN/CLOSE ⏏ , CD ● / HDD ▶ , SELECTOR < , SELECTOR > , ■ , ▶▶| / ▶▶ , |◀◀ / ◀◀
Remote controller unit	HDD (MUSIC COLLECTION), TUNER/BAND, SELECTOR <, SELECTOR >, NUMERIC KEYS 0~9, ≧10 , ■ , ❚❚ , ▶▶| , |◀◀ , ▶▶ , ◀◀ , CANCEL, HDD REC, PLAY MODE, SETUP, 2ND SELECT, START, SUBMENU.

10.4.2. Cancellation

The lock can be cancelled by the same procedure as used in setting. ("UNLOCKED" is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

10.5. Service Precautions

10.5.1. Recovery after the DVD player is repaired

- When the FLASH ROM IC or DVD Module P.C.B. is replaced, carry out the recovery processing to optimize the drive.
  Playback the recovery disk to process the recovery automatically.
- Recovery disc (Product number: RFKZD03R005) [SPG]
- Performing recovery process
  1. Load the recovery disc RFKZD03R005 on to the player and run it.
  2. Recovery is performed automatically. When it is finished, a message appears on the screen.
  3. Remove the recovery disc.
  4. Turn off the power.
  5. Initialize the player.

10.5.2. Firmware version-up of the DVD player

- The firmware of the DVD player may be renewed to improve the quality including operability and playability to the substandard discs.processing to optimize the drive.
  The recovery disc has also firmware version-up.
- After version-up, recovery processing is executed automatically.
- Part number of the recovery disc for version-up will be noticed when it is supplied.
- Updating firmware
  1. Load the recovery disc on to the player and run it.
  2. Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.
  3. Using remote controller´s cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
  4. a. If Yes is selected, version updating is performed.
     b. If No is selected, only recovery is performed.
  5. a. When updating is finished, remove the disc according to the message appearing on the screen.
     b. Remove the disc according to the message appearing on the screen.
  6. Turn off the power.

Note:

If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out.
In such a case, replace the FLASH ROM IC and carry out the version-up again.

10.5.3. DVD Module P.C.B. Reset

- When after replacing FLASH ROM IC or DVD Module P.C.B., FL displays error code “ DVD F897”. This means the unit is not initialized properly and the following process needs to be carry out.
- Procedures:
  1. Press ≧10 on remote control while pressing “STOP” button on main unit. (To enter into initialization)
  2. FL display show “INIT”
  3. While still pressing “STOP” button on main unit, press “ENTER” on remote control. (To reset the unit)
  4. FL will display “RESET” before FL display will change to TOC reading again.
  5. Power off unit. Unplug the AC cord.
  6. Power on the unit. It should be no problem. If problem persist check on the DVD Module P.C.B. or FLASH ROM IC.

11 Assembling and Disassembling

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

Special Note:

1. **This section describes the disassembly procedures for all the major printed circuit boards and main components.**
2. **Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out. (Ensure that no AC power supply is connected during disassembling.)**
3. **For assembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**
4. **The Switch Regulator IC may have high temperature after prolonged use.**
5. **Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.**

CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK

6. **Select items from the following index when checks or replacement are required.**

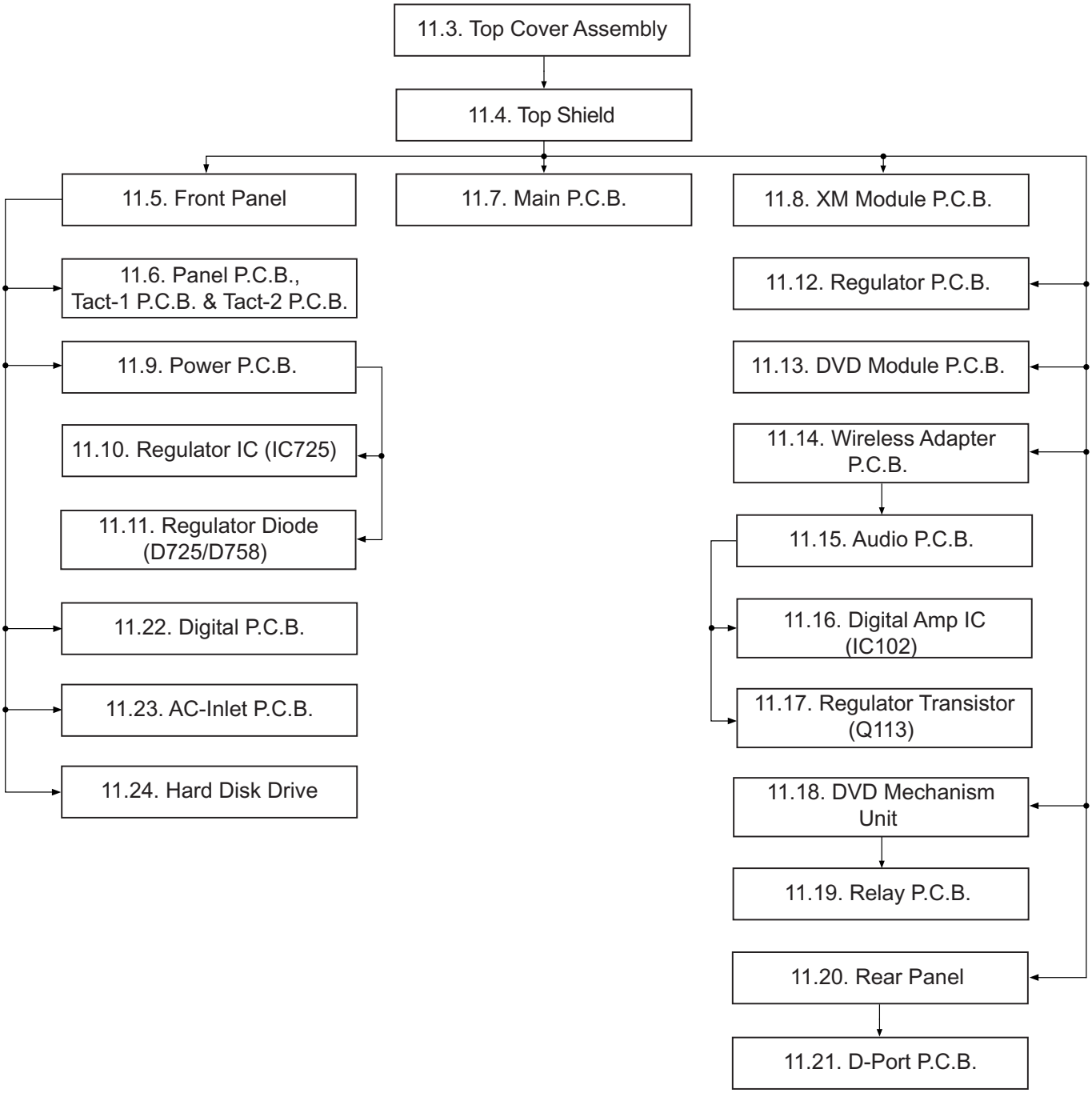
- Disassembly of Top Cover Assembly
- Disassembly of Top Shield
- Disassembly of Front Panel
- Disassembly of Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B.
- Disassembly of Main P.C.B.
- Disassembly of XM Module P.C.B.
- Disassembly of Power P.C.B.
- Replacement of Regulator IC (IC725)
- Replacement of Regulator Diode (D725/D758)
- Disassembly of Regulator P.C.B.
- Disassembly of DVD Module P.C.B.
- Disassembly of Wireless Adapter P.C.B.
- Disassembly of Audio P.C.B.
- Replacement of Digital Amp IC (IC102)
- Replacement of Regulator Transistor (Q113)
- Disassembly of DVD Mechanism Unit
- Disassembly of Relay P.C.B.
- Disassembly of Rear Panel
- Disassembly of D-Port P.C.B.
- Disassembly of Digital P.C.B.
- Disassembly of AC-Inlet P.C.B.
- Disassembly of Hard Disk Drive

CAUTION NOTE:
Please use original screw and at correct locations.

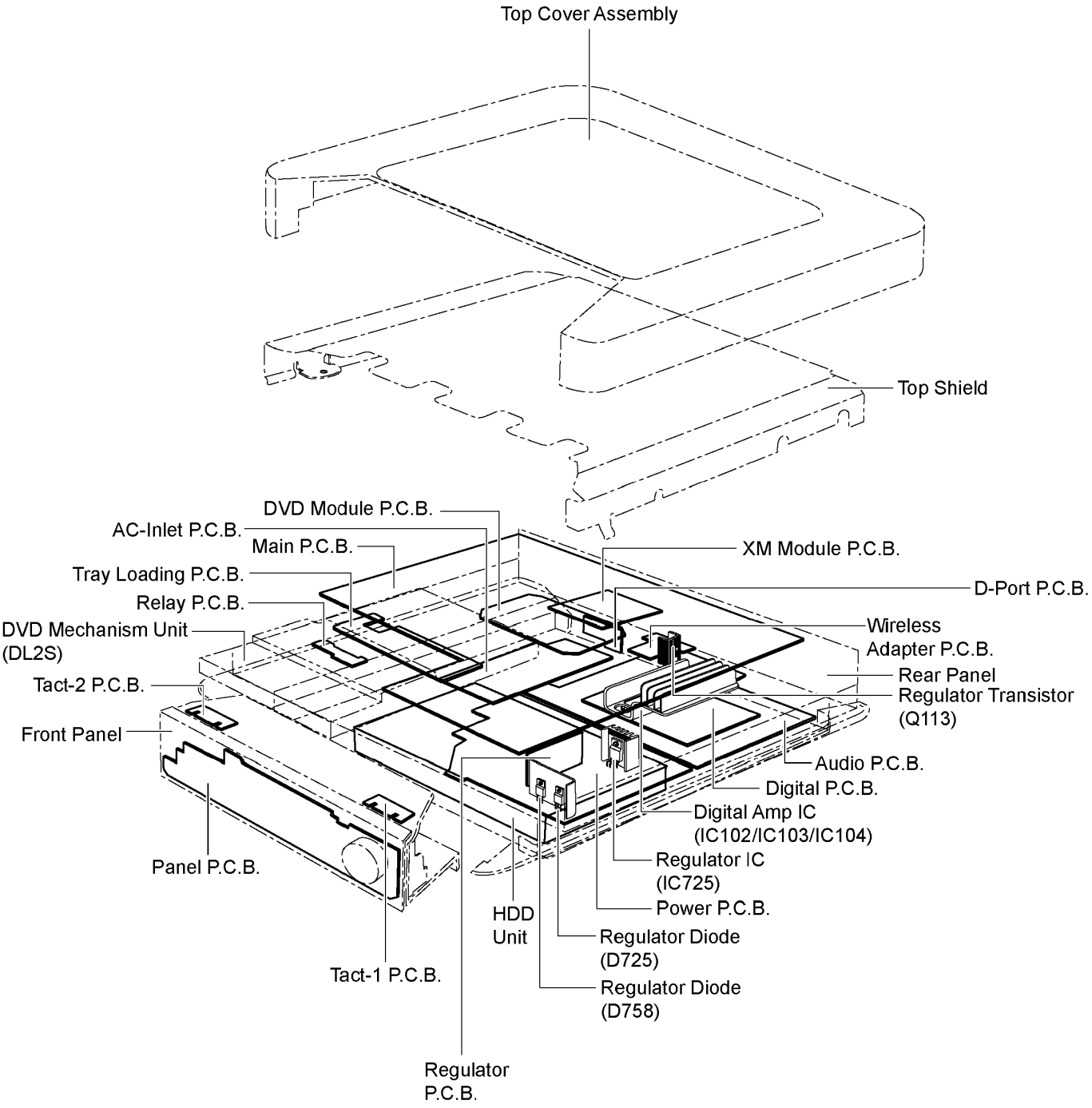
Below shown is the part no. of different screw types used:

- ⓐ :RHD30119-S
- ⓑ :RHD30111-3
- ⓒ :RHD26046
- ⓓ :XSN3+4FJ
- ⓔ :XYN3+F8FJ
- ⓕ :XTB3+8JFJ
- ⓖ :XTB3+10JFJ
- ⓗ :XTV2+6GFJ
- ⓘ :RHD30154
- ⓙ :XTN26+6GFJ

11.1. Disassembly Flow Chart

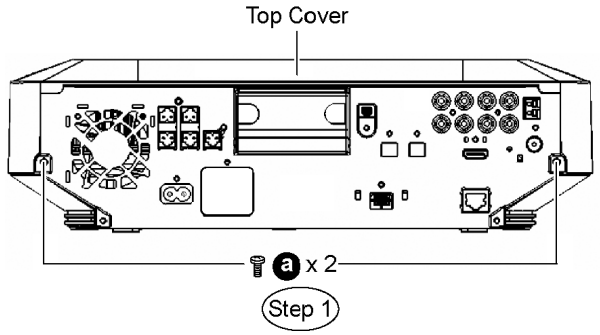


11.2. Main Components and P.C.B. Locations



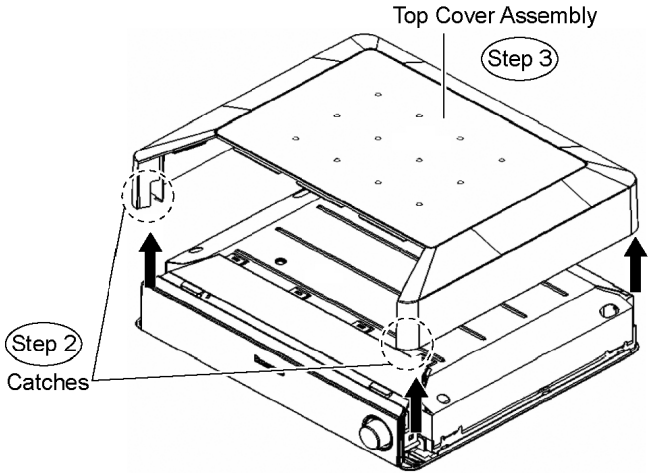
11.3. Disassembly of Top Cover Assembly

Step 1 Remove 2 screws.



Step 2 Release 2 catches on the side in the direction of arrows.

Step 3 Lift up the top cover assembly in the direction of arrows to remove it.

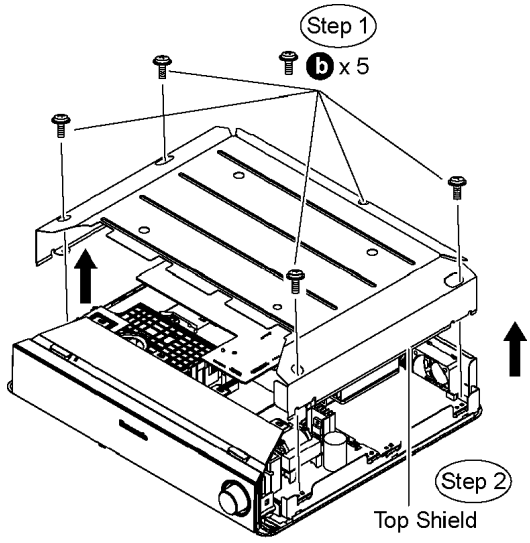


11.4. Disassembly of Top Shield

- Follow (Step 1) to (Step 3) of Item 11.3.

Step 1 Remove 5 screws.

Step 2 Remove the top shield in the direction of arrows.



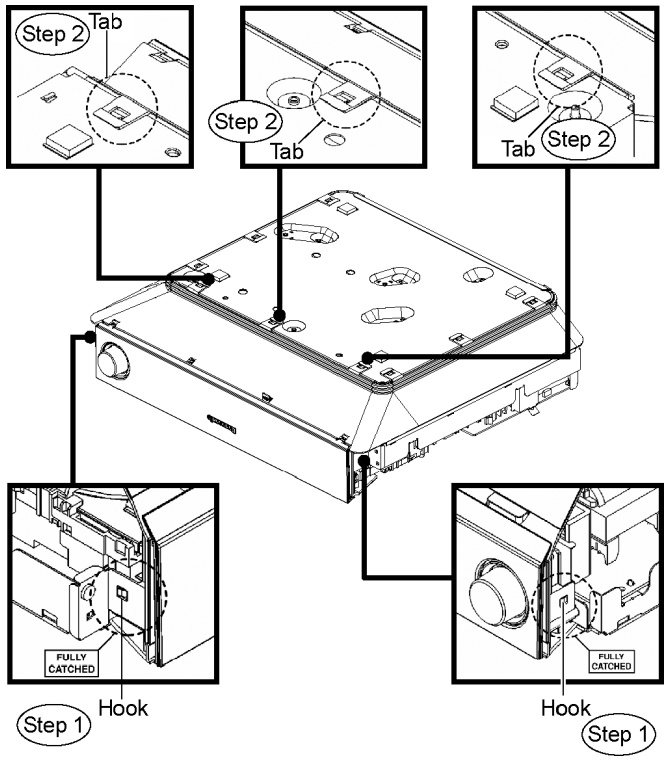
11.5. Disassembly of Front Panel

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.

Step 1 Release the hook at each side of the front panel.

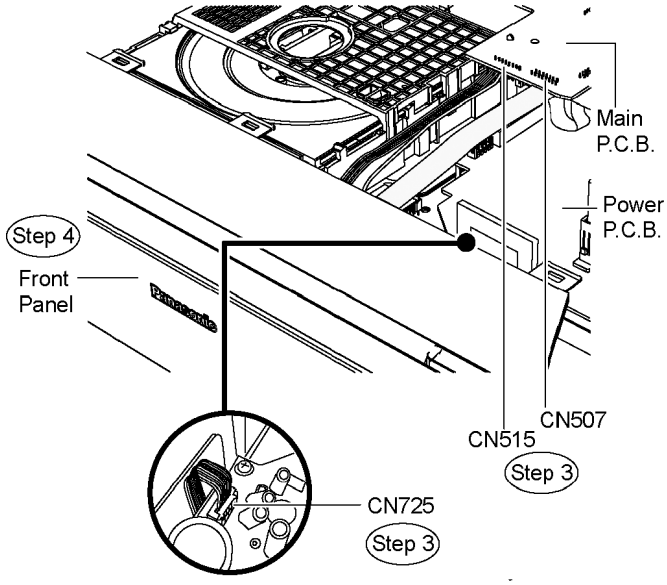
Step 2 Release the tabs at the bottom of the front panel.

Caution: Do not exert strong force when releasing the tabs.



Step 3 Detach cables at the connectors (CN725) on Power P.C.B. and (CN515 & CN507) on Main P.C.B.

Step 4 Remove the front panel.

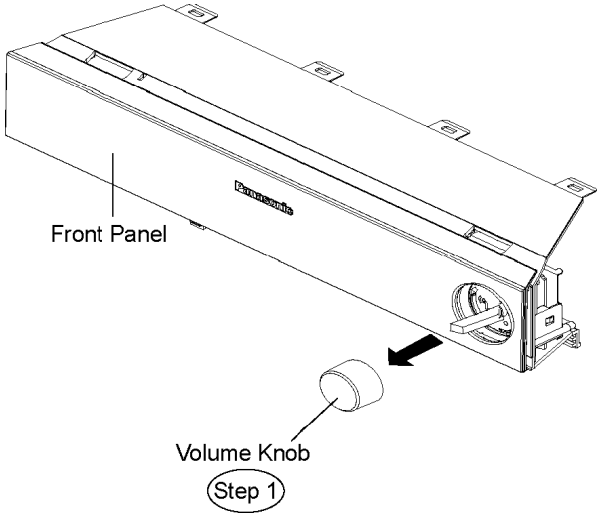


11.6. Disassembly of Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.

- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.

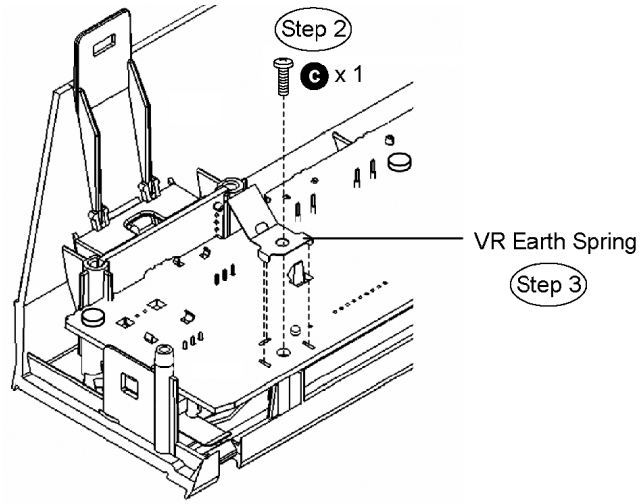
Step 1 Remove the volume knob from the front panel.



- Disassembly of VR Earth Spring

Step 2 Remove 1 screw.

Step 3 Remove the VR earth spring.

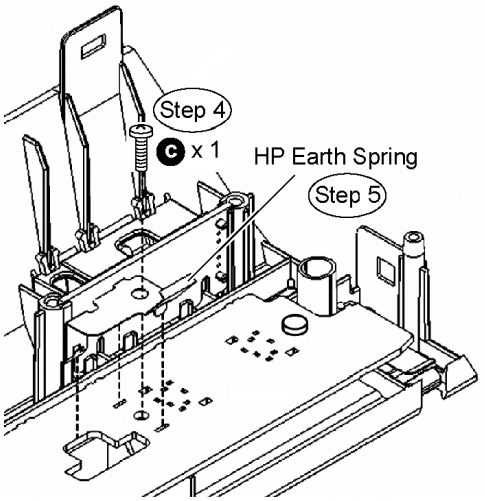


Caution Note: Keep the VR earth spring in safe place. Avoid denting the spring. Place the VR earth spring back during assembling.

- Disassembly of HP Earth Spring

Step 4 Remove 1 screw.

Step 5 Remove the HP earth spring.



Caution Note: Keep the HP earth spring in safe place. Avoid denting the spring. Place the HP earth spring back during assembling.

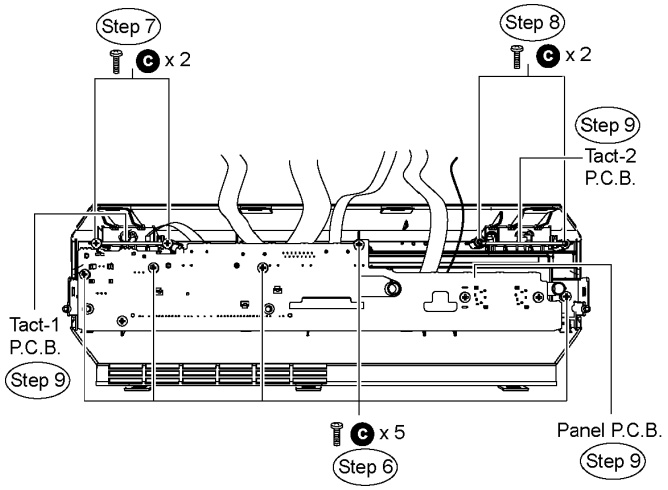
- Disassembly of Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B.

Step 6 Remove 5 screws from Panel P.C.B.

Step 7 Remove 2 screws from Tact-1 P.C.B.

Step 8 Remove 2 screws from Tact-2 P.C.B.

Step 9 Remove Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B.

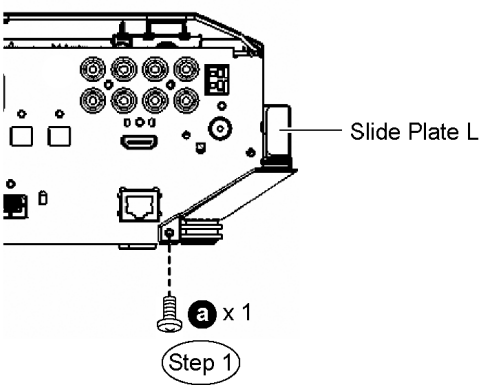


11.7. Dissassembly of Main P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.

- Disassembly of Slide Plate L

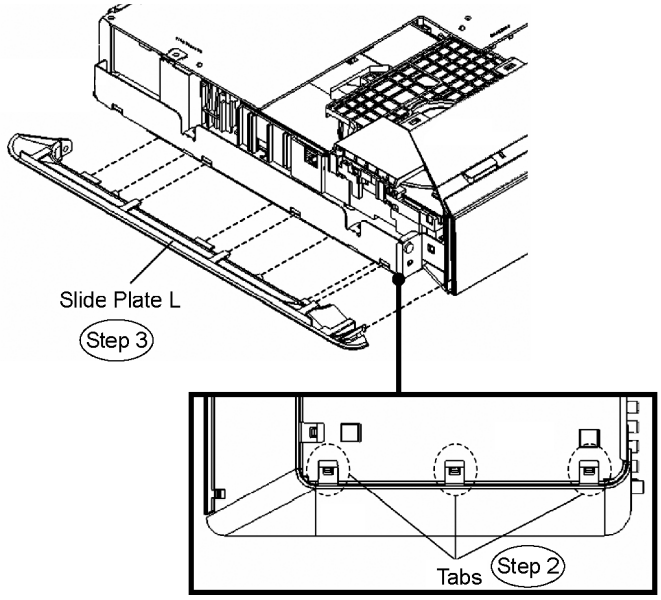
Step 1 Remove 1 screw.



Step 2 Release the tabs at the bottom of the slide plate L.

Caution: Do not exert strong force when releasing the tabs.

Step 3 Remove the slide plate L.



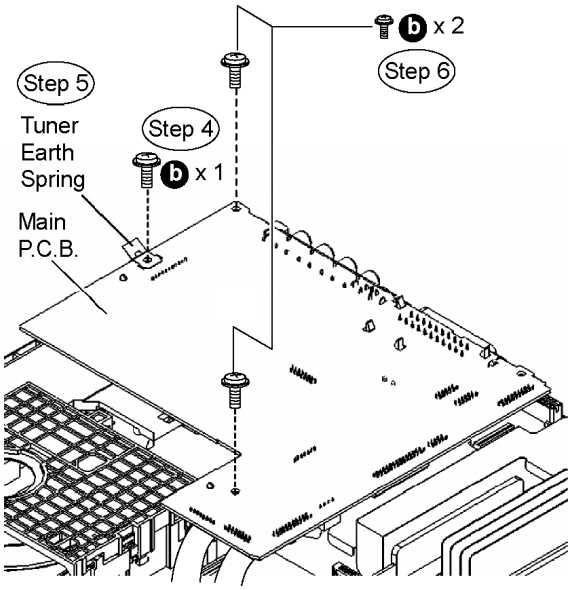
● Disassembly of Tuner Earth Spring

Step 4 Remove 1 screw.

Step 5 Remove the tuner earth spring.

● Disassembly of Main P.C.B.

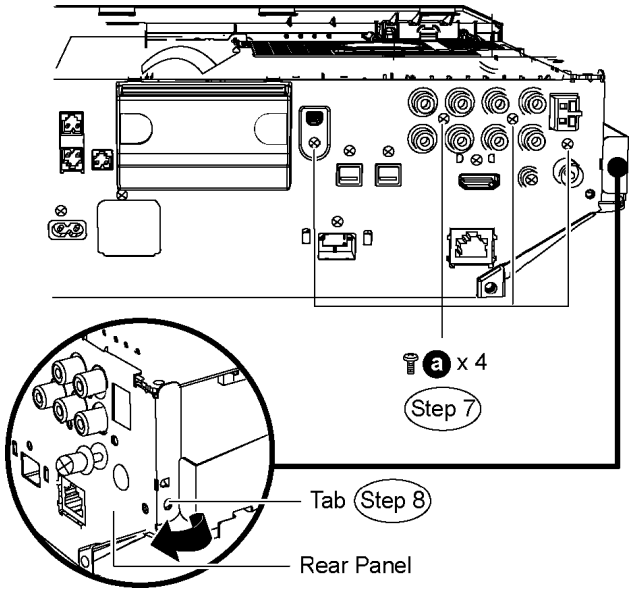
Step 6 Remove 2 screws from Main P.C.B.



Caution Note: Keep the tuner earth spring in safe place. Avoid denting the spring. Place the tuner earth spring back during assembling.

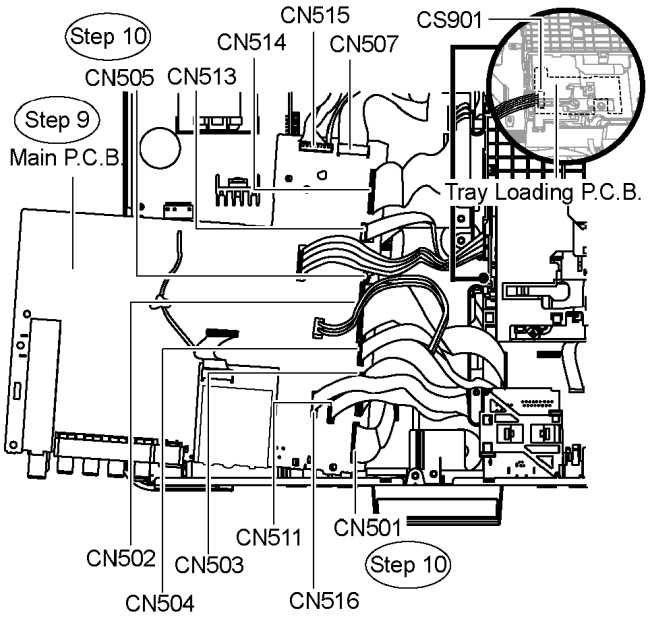
Step 7 Remove 4 screws from the rear panel.

Step 8 Release the tab of the rear panel in the direction of arrow.



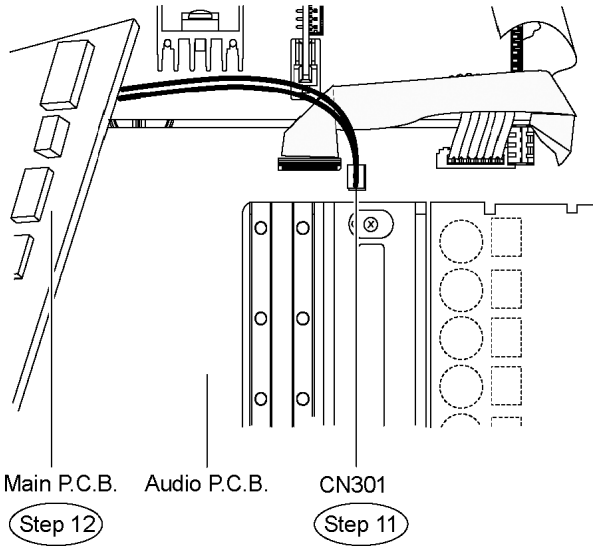
Step 9 Remove Main P.C.B. from the rear panel and flip it to another side.

Step 10 Detach cables from the connectors (CN501, CN502, CN503, CN504, CN505, CN507, CN511, CN513, CN514, CN515 & CN516) on Main P.C.B. and (CS901) on Tray Loading P.C.B.



Step 11 Detach cable from the connector (CN301) on Audio P.C.B.

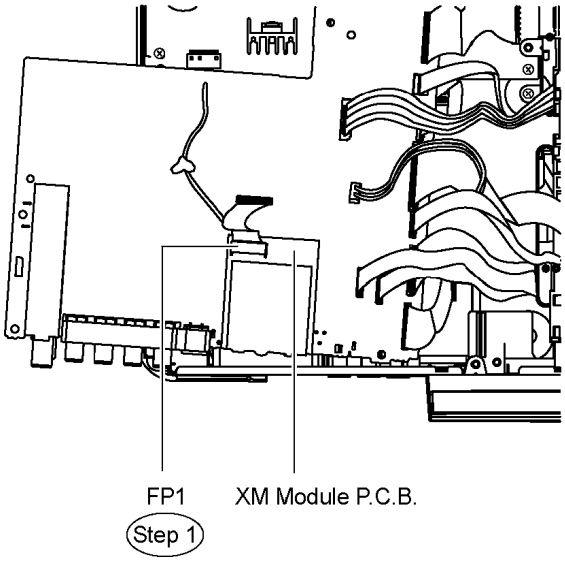
Step 12 Remove Main P.C.B.



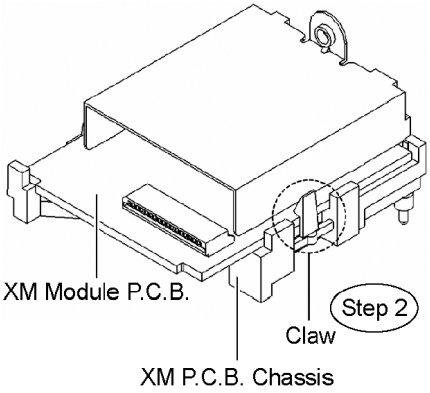
11.8. Disassembly of XM Module P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.

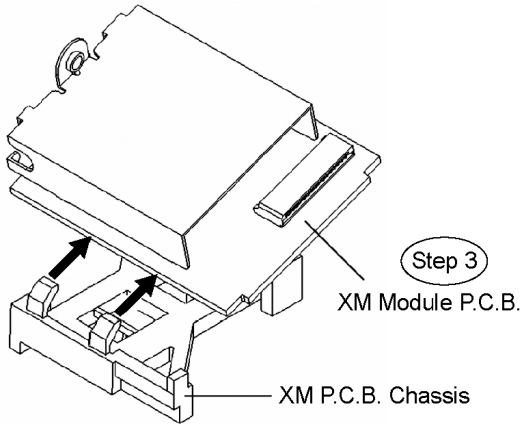
Step 1 Detach FFC cable from the connector (FP1) on XM Module P.C.B.



Step 2 Release the claw of the XM P.C.B. chassis.



Step 3 Remove XM Module P.C.B. from the XM P.C.B. chassis in the direction of arrows.

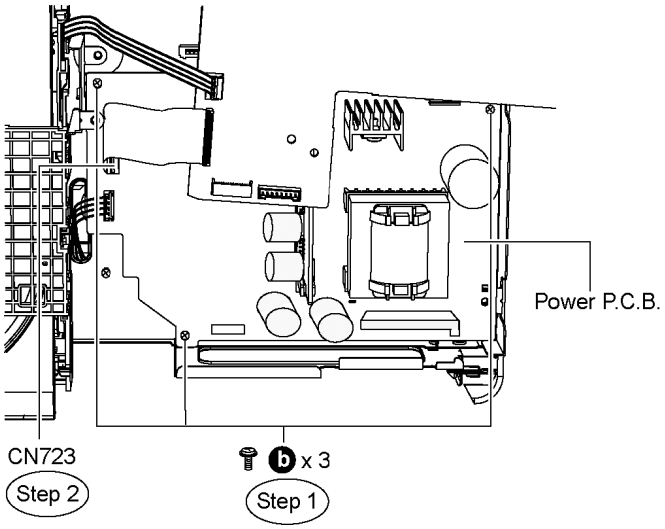


11.9. Disassembly of Power P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.

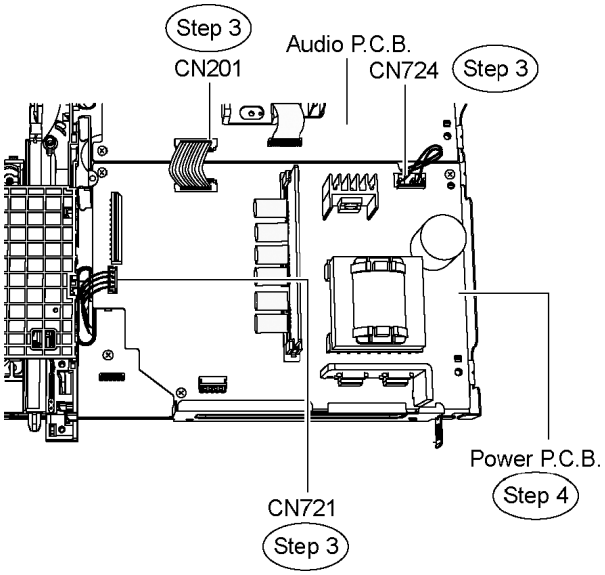
Step 1 Remove 3 screws from Power P.C.B.

Step 2 Detach cable from the connector (CN723) on Power P.C.B.



Step 3 Detach cables from the connectors (CN201) on Audio P.C.B. and (CN721 & CN724) on Power P.C.B.

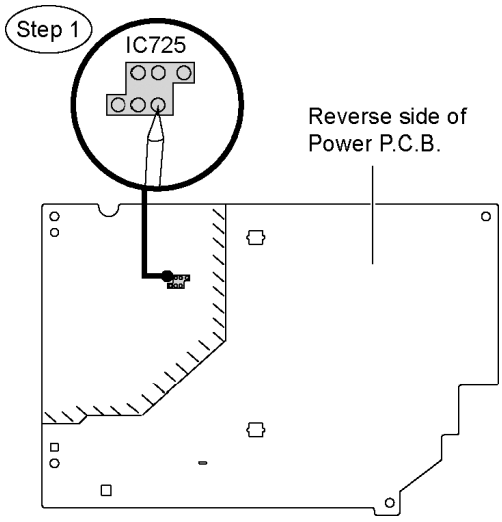
Step 4 Remove Power P.C.B.



11.10. Replacement of Regulator IC (IC725)

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 4) of Item 11.9.

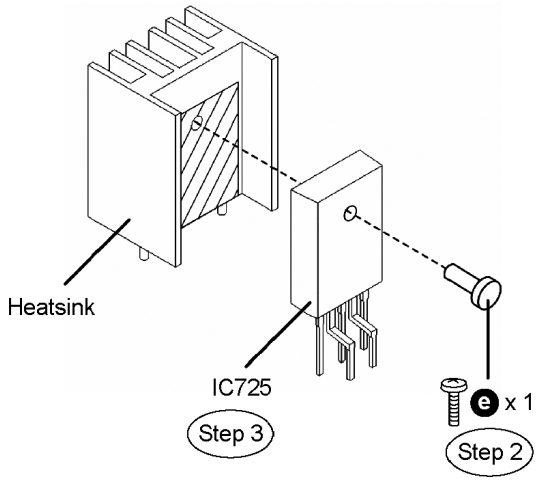
Step 1 Desolder pins of the regulator IC (IC725) on the reverse side of Power P.C.B.



Step 2 Remove 1 screw from the regulator IC (IC725).

Step 3 Remove the regulator IC (IC725) from the heatsink.

Caution: Handle the heatsink with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

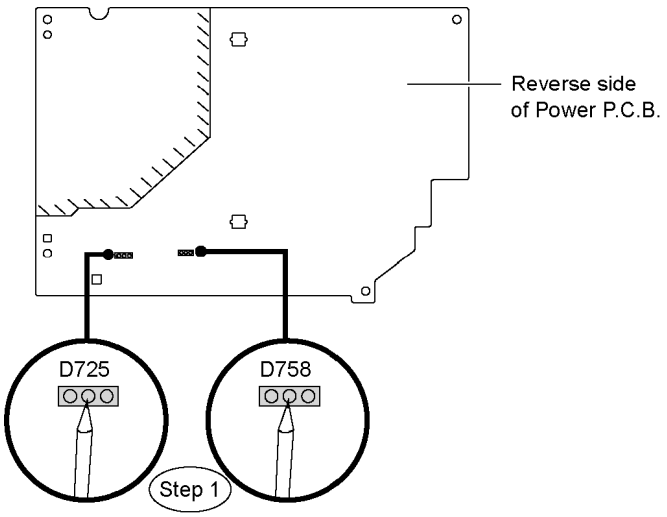


Note : Refer to the diagram of Power P.C.B. (Item 11.9.) for location of the parts.

11.11. Replacement of Regulator Diode (D725/D758)

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 4) of Item 11.9.

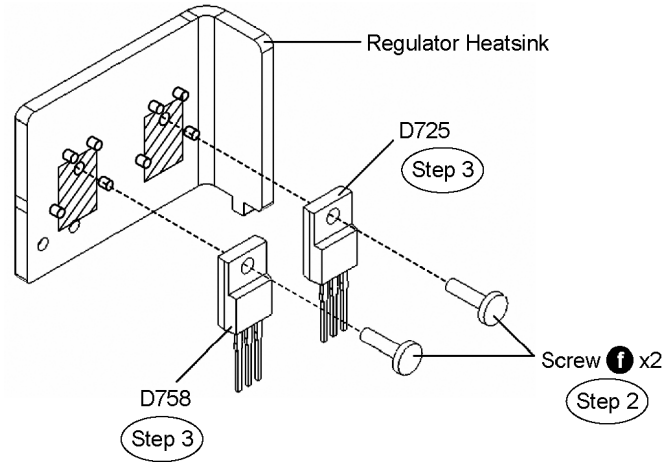
Step 1 Desolder pins of the regulator diode (D725/D758) on the reverse side of Power P.C.B.



Step 2 Remove 1 screw from the regulator diode (D725/D758).

Step 3 Remove the regulator diode (D725/D758) from the regulator heatsink.

Caution: Handle the regulator heatsink with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



Note : Refer to the diagram of Power P.C.B. (Item 11.9.) for location of the parts.

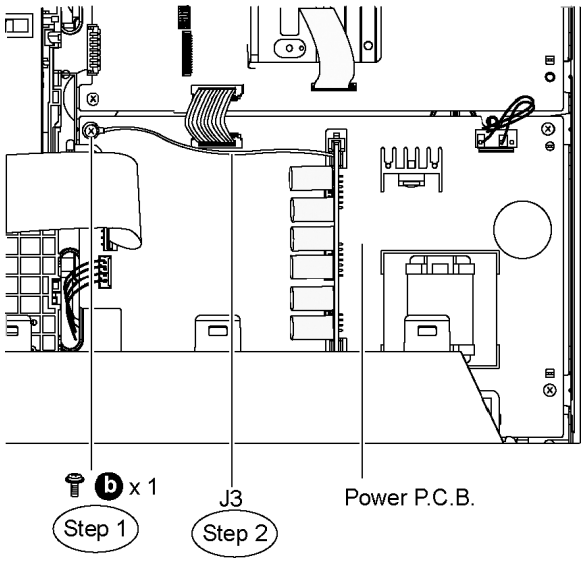
11.12. Disassembly of Regulator P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.

Step 1 Remove 1 screw from Power P.C.B.

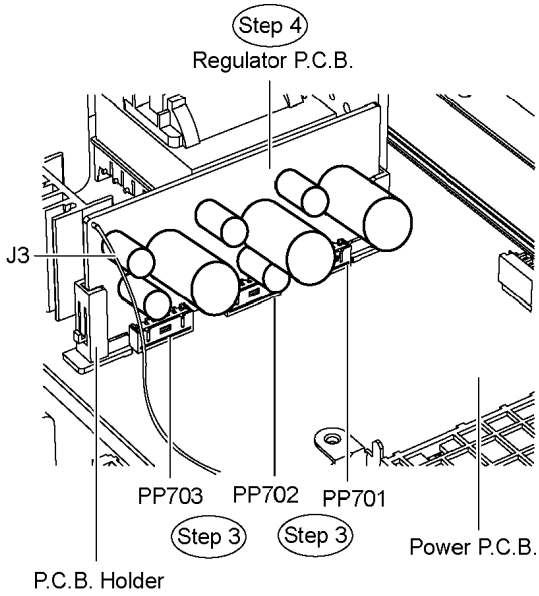
Step 2 Remove the shield wire J3 (brown).

Caution: Remember to attach the shield wire (brown) during assembling.



Step 3 Detach Regulator P.C.B. from the connectors (PP701, PP702 & PP703) on Power P.C.B.

Step 4 Remove Regulator P.C.B. from the P.C.B. holders.

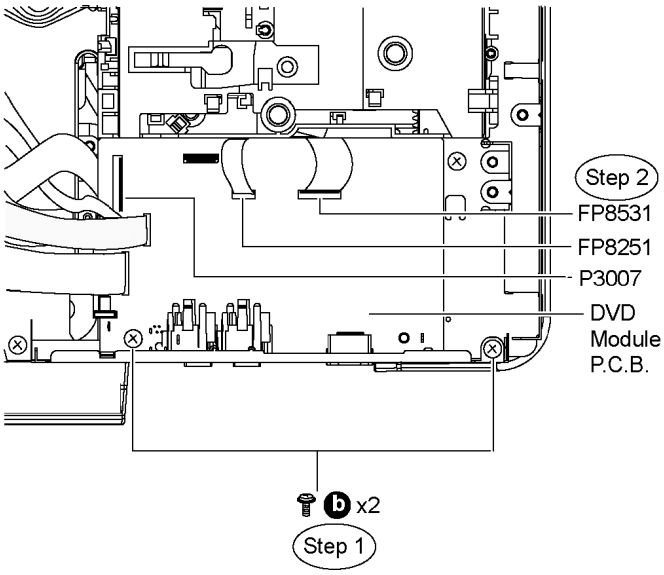


11.13. Disassembly of DVD Module P.C.B

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.

Step 1 Remove 2 screws from DVD Module P.C.B.

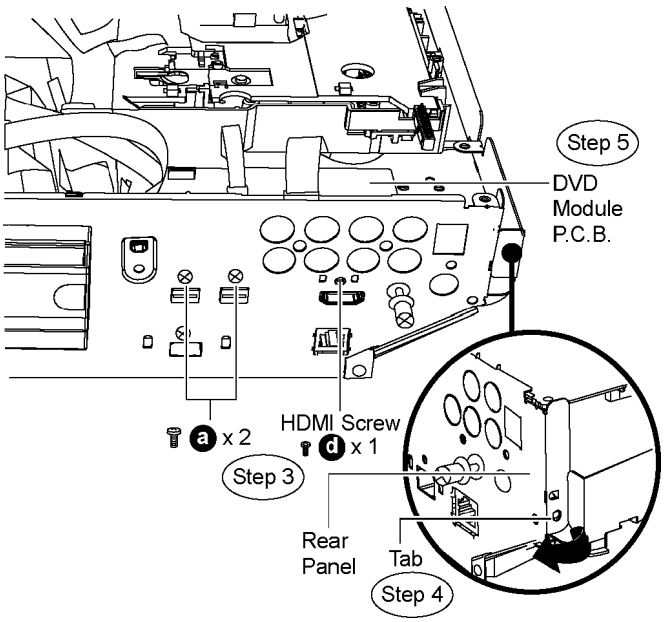
Step 2 Detach FFC cables from the connectors (FP8251, FP8531 & P3007) on DVD Module P.C.B.



Step 3 Remove 3 screws from the rear panel.

Step 4 Release the tab of the rear panel in the direction of the arrow.

Step 5 Remove DVD Module P.C.B.

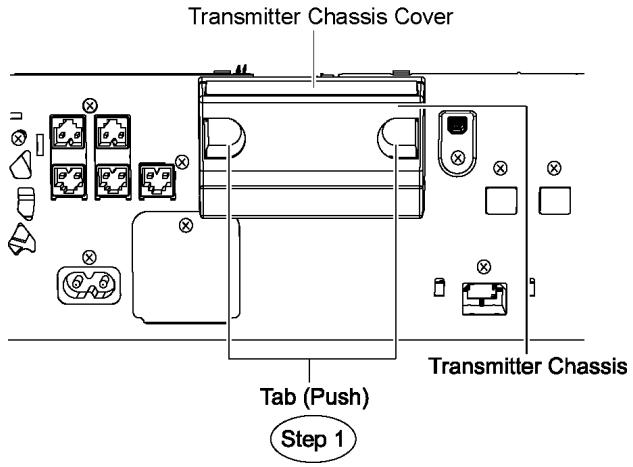


11.14. Disassembly of Wireless Adapter P.C.B.

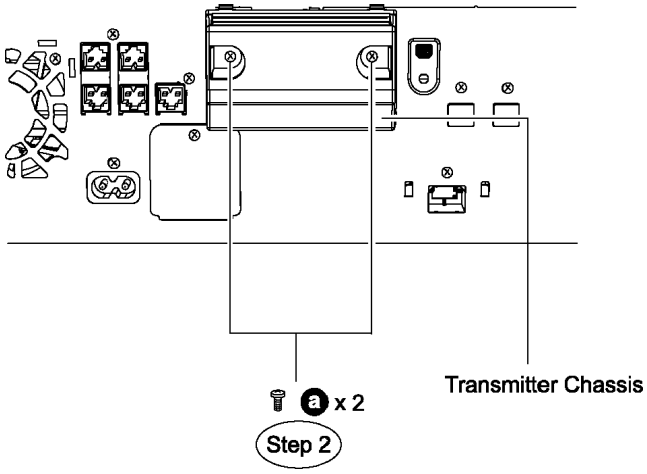
- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.

- Disassembly of Transmitter Chassis

Step 1 Remove the transmitter chassis cover by pushing the tab.

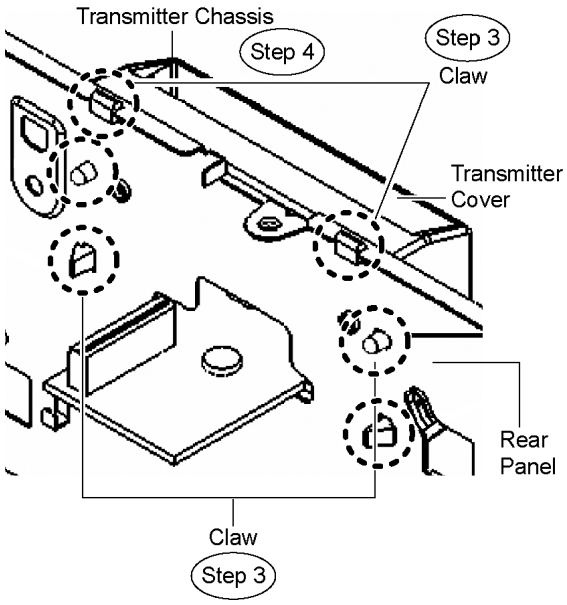


Step 2 Remove 2 screws.



Step 3 Release the claws of the transmitter chassis.

Step 4 Remove the transmitter chassis with transmitter cover from the rear panel.

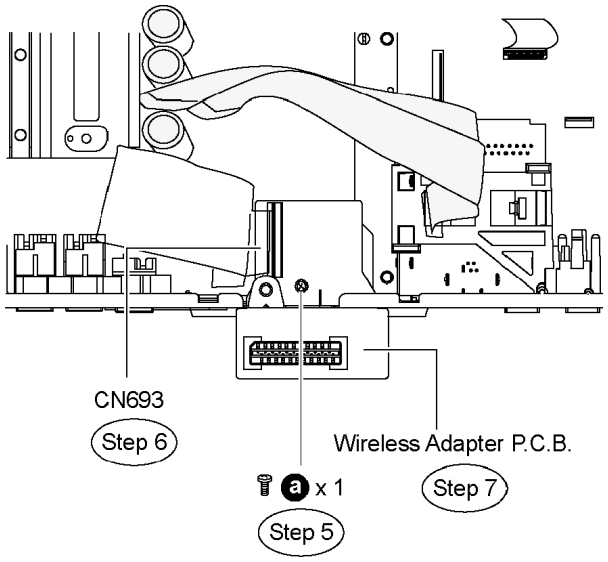


- Disassembly of Wireless Adapter P.C.B.

Step 5 Remove 1 screw from Wireless Adapter P.C.B.

Step 6 Detach FFC cable from the connector (CN693) on Wireless Adapter P.C.B.

Step 7 Remove Wireless Adapter P.C.B.

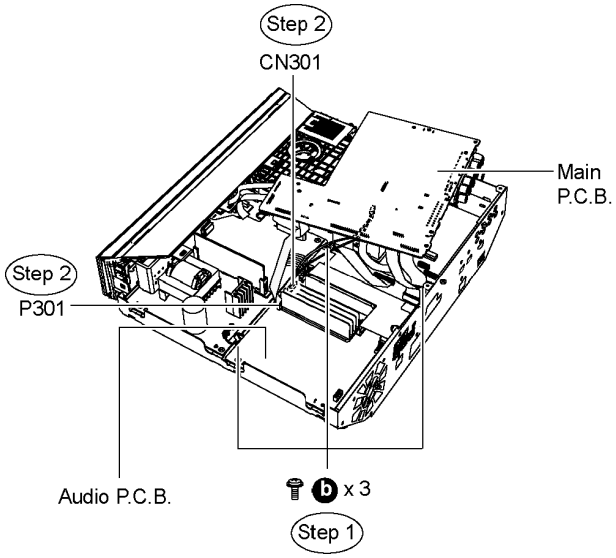


11.15. Disassembly of Audio P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 7) of Item 11.14.

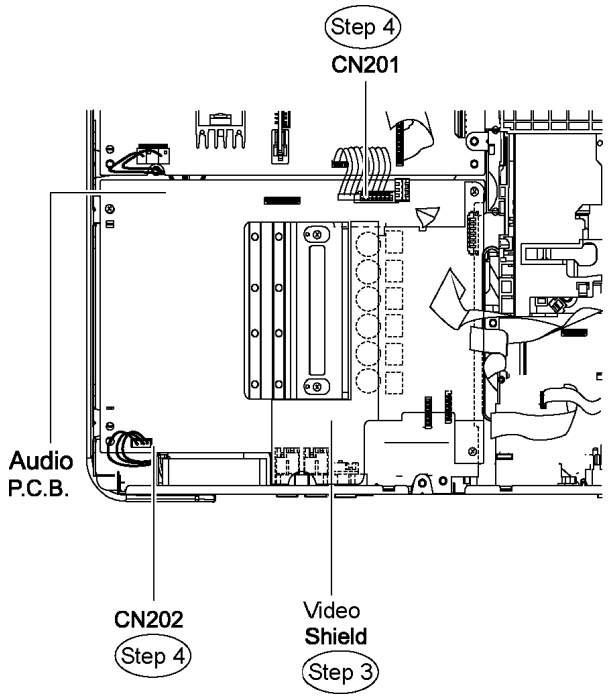
Step 1 Move aside Main P.C.B. (as diagram shown) in order to remove 3 screws from Audio P.C.B.

Step 2 Detach cable from the connector (P301 & CN301) on Audio P.C.B.



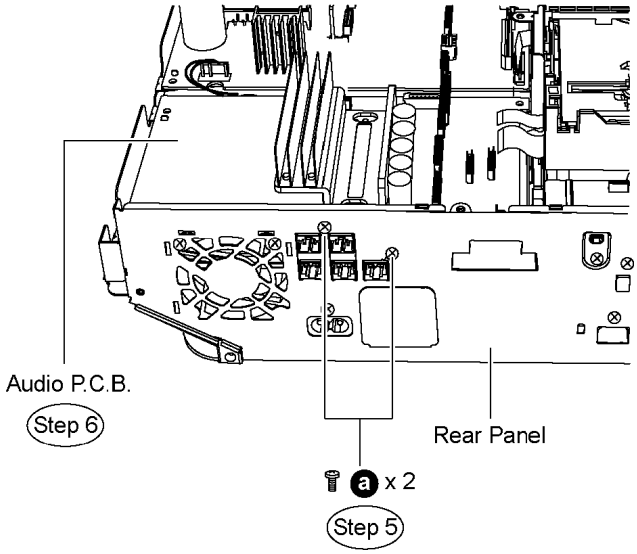
Step 3 Remove the video shield.

Step 4 Detach cables from the connectors (CN201 & CN202) on Audio P.C.B.



Step 5 Remove 2 screws from the rear panel.

Step 6 Remove Audio P.C.B.



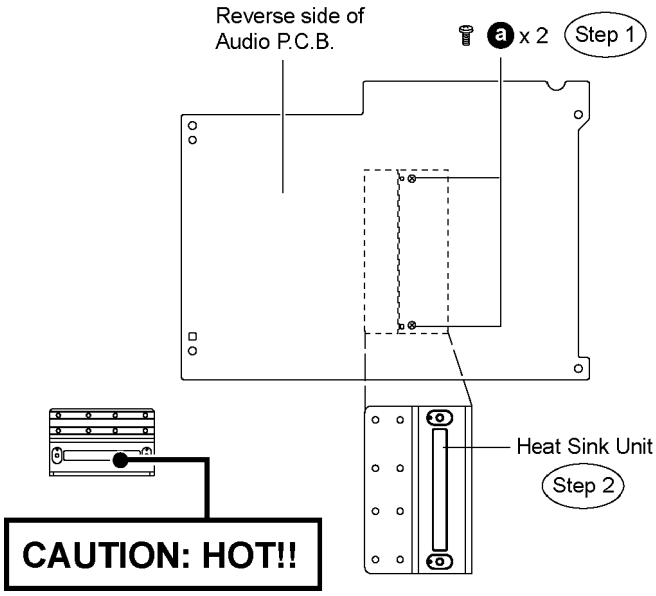
11.16. Replacement of Digital Amp IC (IC102)

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 7) of Item 11.14.
- Follow (Step 1) to (Step 6) of Item 11.15.

- Disassembly of Heat Sink Unit

Step 1 Remove 2 screws on the reverse side of Audio P.C.B.

Step 2 Remove the heat sink unit.

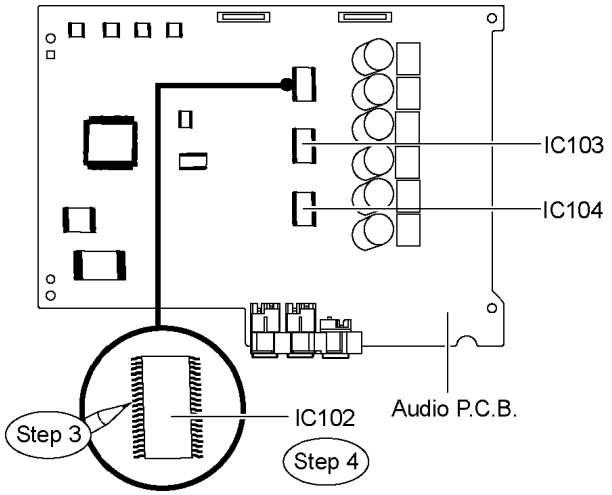


- Disassembly of Digital Amp IC (IC102)

Step 3 Desolder pins of the digital amp IC (IC102) on Audio P.C.B.

Step 4 Remove the digital amp IC (IC102) from Audio P.C.B.

Caution: Handle the heat sink unit with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

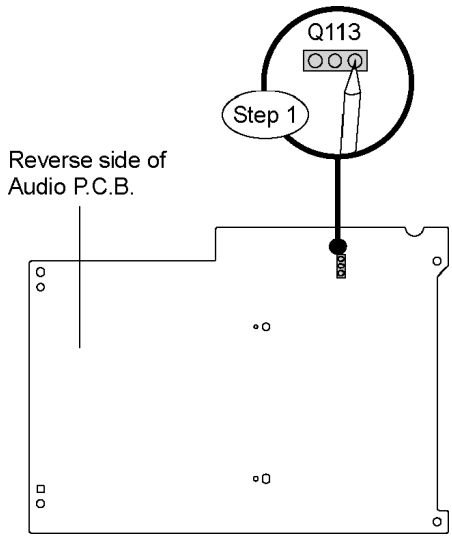


Note : For disassembly of digital amp ICs (IC103 & IC104), repeat the (Step 1) to (Step 4). Refer to the diagrams of Audio P.C.B. (Item 11.15.) for location of the parts.

11.17. Replacement of Regulator Transistor (Q113)

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 7) of Item 11.14.
- Follow (Step 1) to (Step 6) of Item 11.15.

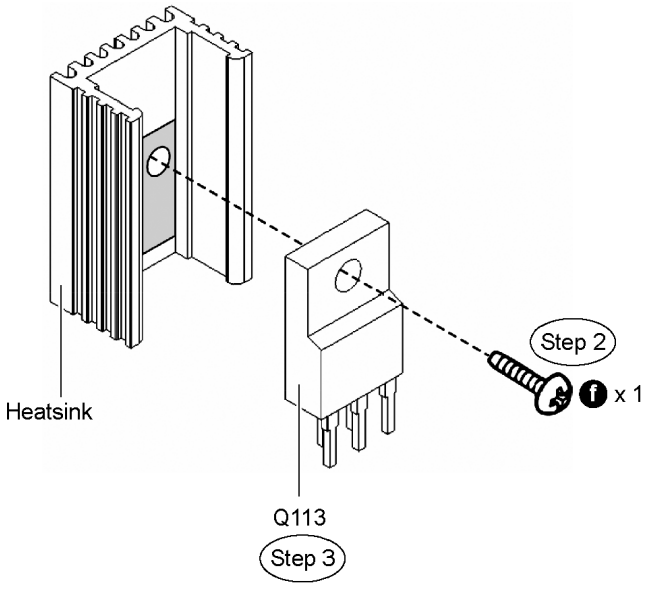
Step 1 Desolder pins of the regulator transistor (Q113) on the reverse side of Audio P.C.B.



Step 2 Remove 1 screw from the regulator transistor (Q113).

Step 3 Remove the regulator transistor (Q113) from the heatsink (S2).

Caution: Handle the heatsink with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



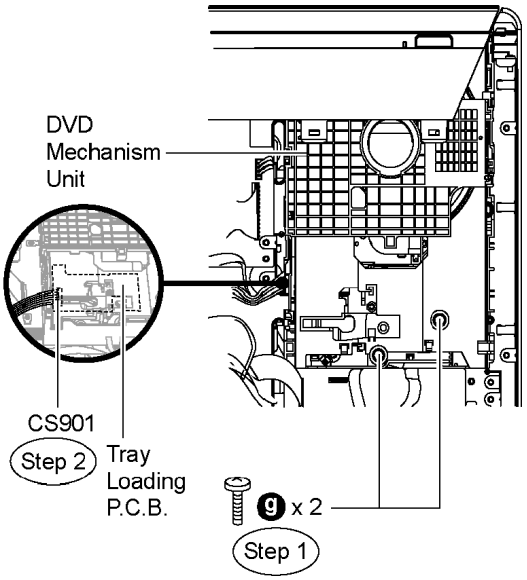
Note : Refer to the diagrams of Audio P.C.B. (Item 11.15.) for location of the part.

11.18. Disassembly of DVD Mechanism Unit

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.

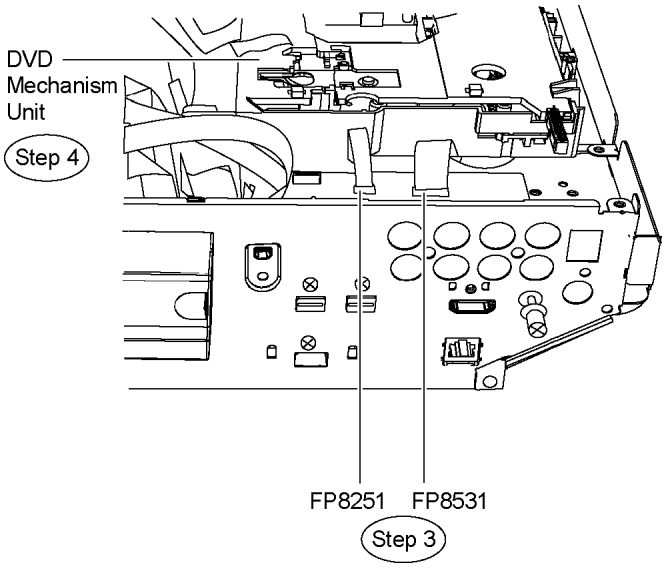
Step 1 Remove 2 screws from the DVD mechanism unit.

Step 2 Detach FFC cable from the connector (CS901) on Tray Loading P.C.B.



Step 3 Detach FFC cables from the connectors (FP8251 & FP8531) on DVD Module P.C.B.

Step 4 Remove the DVD mechanism unit.



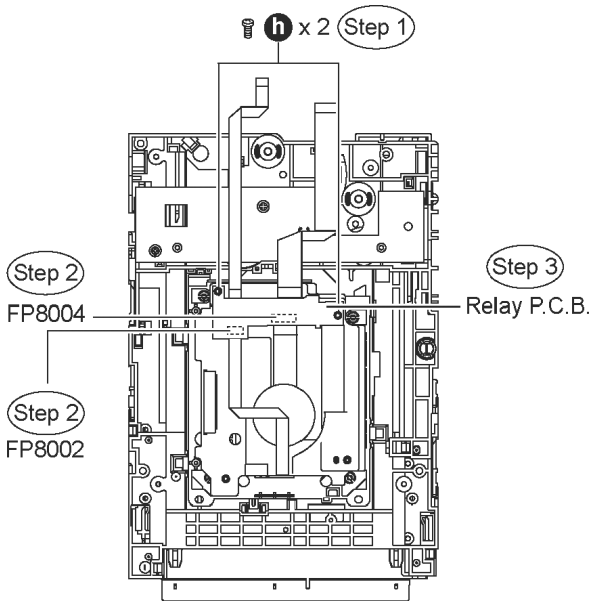
11.19. Disassembly of Relay P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 1) to (Step 4) of Item 11.18.

Step 1 Remove 2 screws from Relay P.C.B.

Step 2 Detach FFC cables from the connectors (FP8002 & FP8004) on Relay P.C.B.

Step 3 Remove Relay P.C.B.



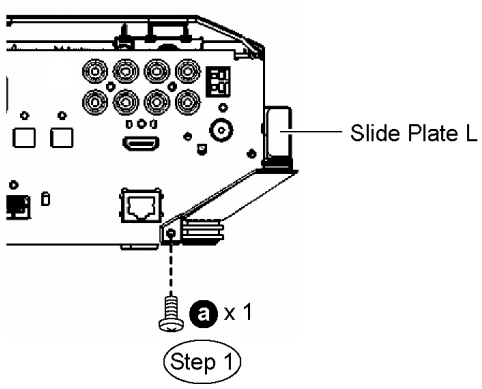
Caution : Do not use strong or excessive force to avoid damage to FFC cables.

11.20. Disassembly of Rear Panel

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.

- Disassembly of Slide Plate L

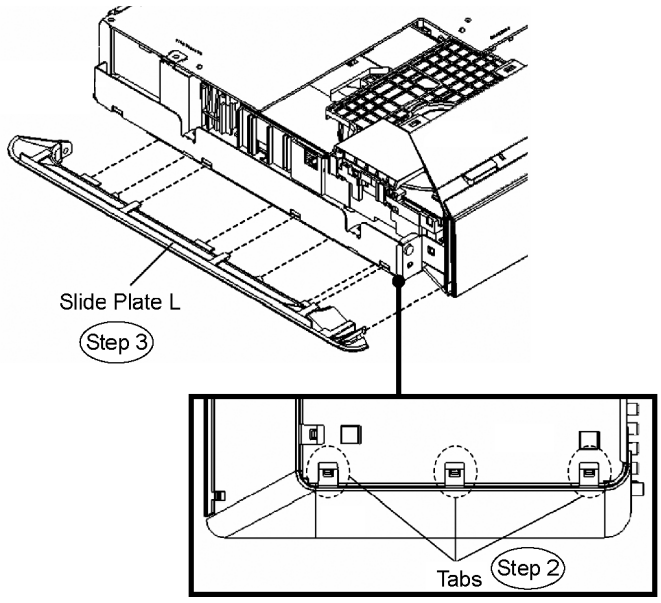
Step 1 Remove 1 screw.



Step 2 Release the tabs at the bottom of the slide plate L.

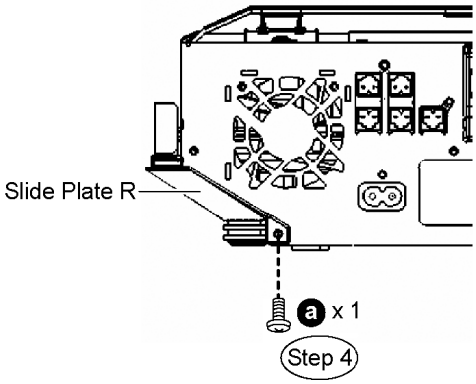
Caution: Do not exert strong force when releasing the tabs.

Step 3 Remove the slide plate L.



● Disassembly of Slide Plate R

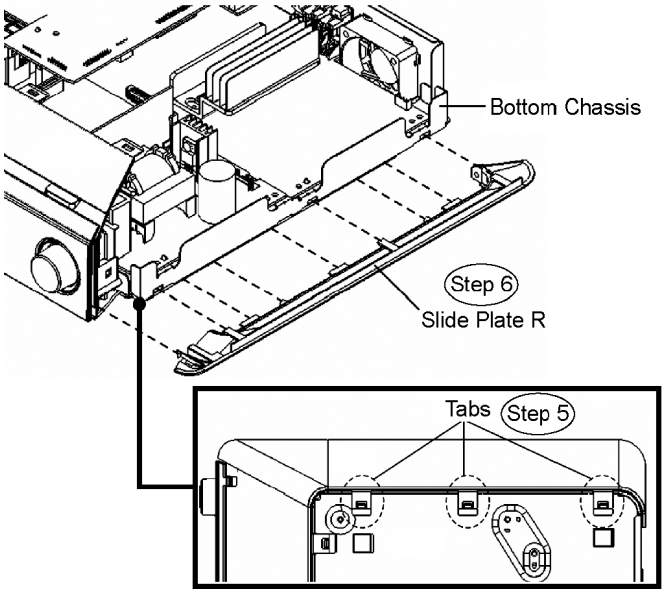
Step 4 Remove 1 screw.



Step 5 Release the tabs at the bottom of the slide plate R.

Caution: Do not exert strong force when releasing the tabs.

Step 6 Remove the slide plate R.

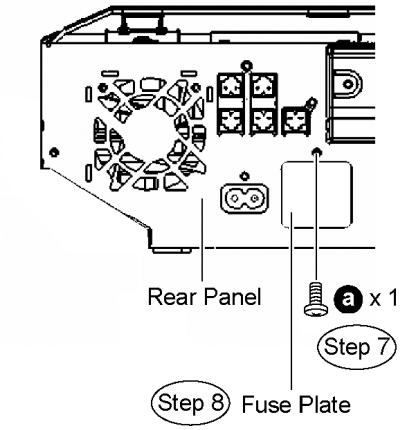


● Disassembly of Fuse Plate

Step 7 Remove 1 screw.

Step 8 Remove the fuse plate.

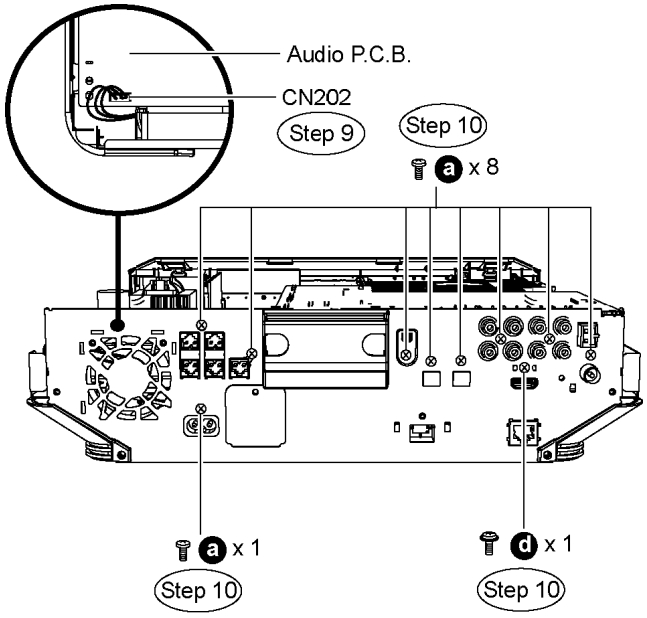
Caution: Keep the fuse plate in safe place. Place it back to its original location during assembling.



● Disassembly of Rear Panel

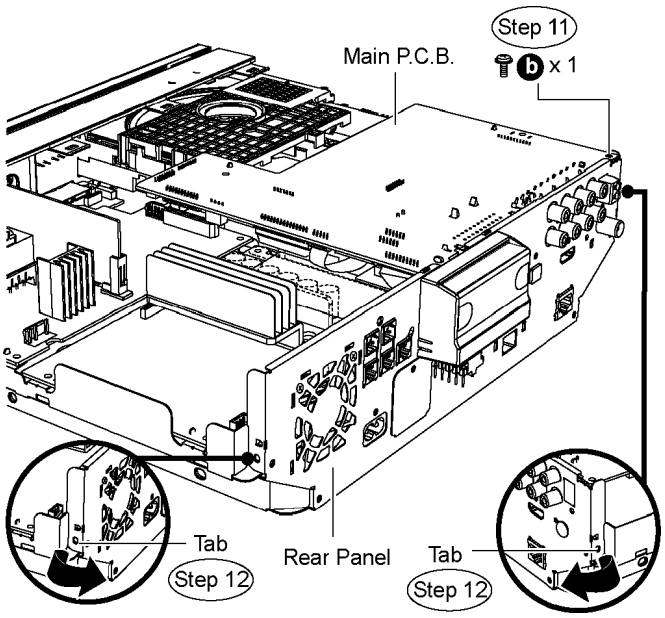
Step 9 Detach cable from the connector (CN202) on Audio P.C.B.

Step 10 Remove 10 screws from the rear panel.



Step 11 Remove 1 screw from Main P.C.B.

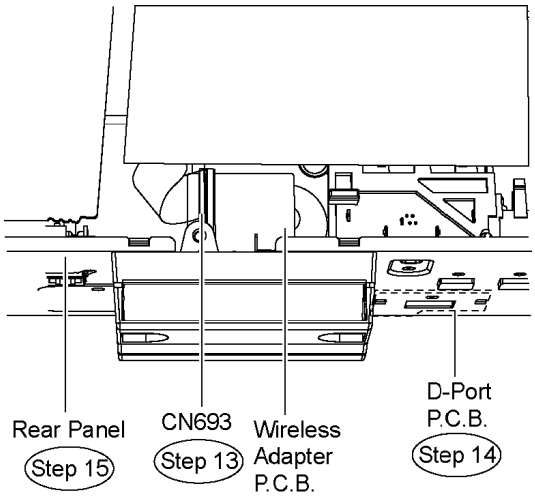
Step 12 Detach the rear panel by releasing the tab at each side.



Step 13 Detach FFC cable from the connector (CN693) on Wireless Adapter P.C.B.

Step 14 Remove D-Port P.C.B. from the the rear panel.

Step 15 Remove the rear panel.

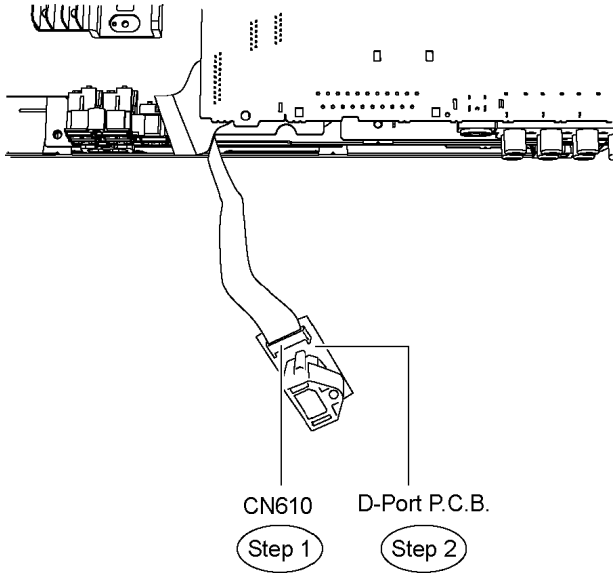


11.21. Disassembly of D-Port P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 15) of Item 11.20.

Step 1 Detach FFC cable from the connector (CN610) on D-Port P.C.B.

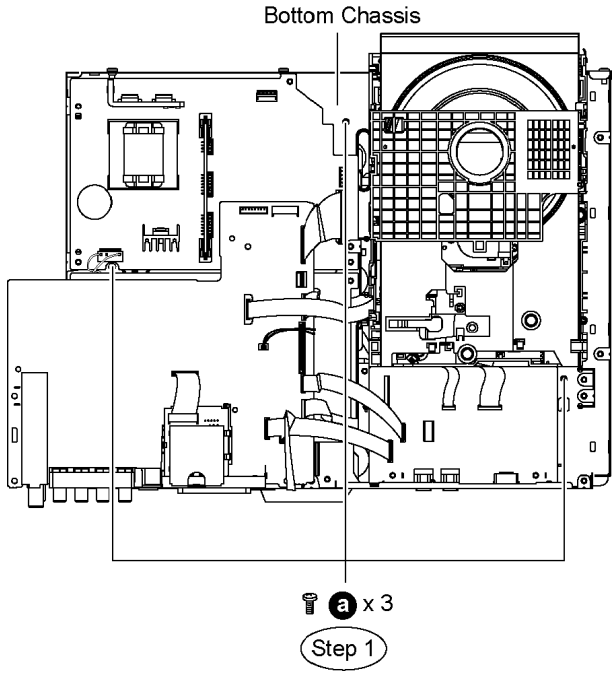
Step 2 Remove D-Port P.C.B.



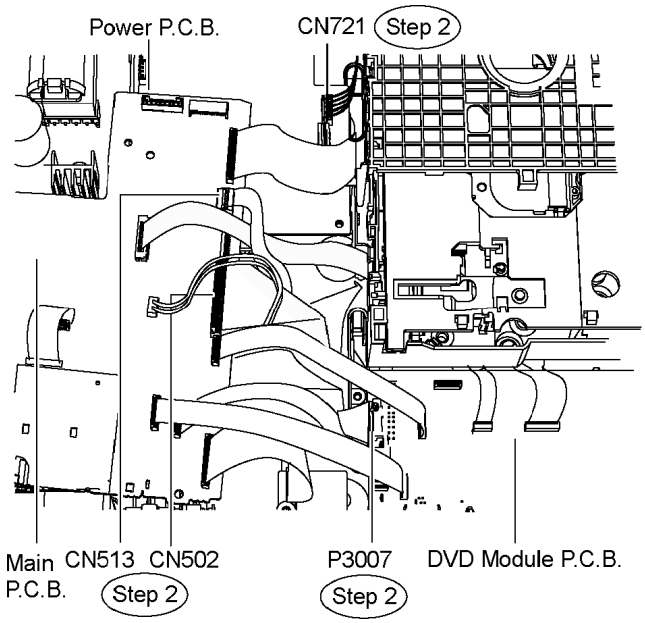
11.22. Disassembly of Digital P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 4) to (Step 6) of Item 11.20. for disassembly of Slide Plate R.

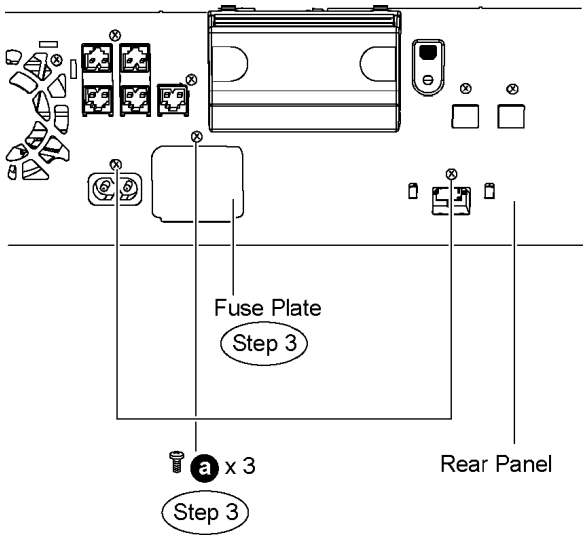
Step 1 Remove 3 screws from the bottom chassis.



Step 2 Detach cables from the connectors (CN721) on Power P.C.B. and (CN502 & CN513) on Main P.C.B. and (P3007) on DVD Module P.C.B.

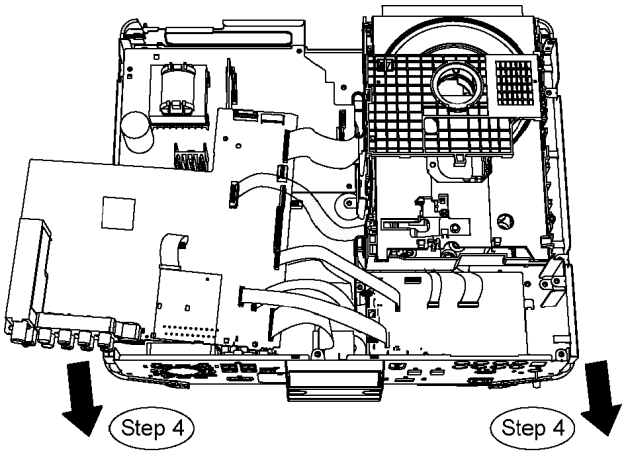


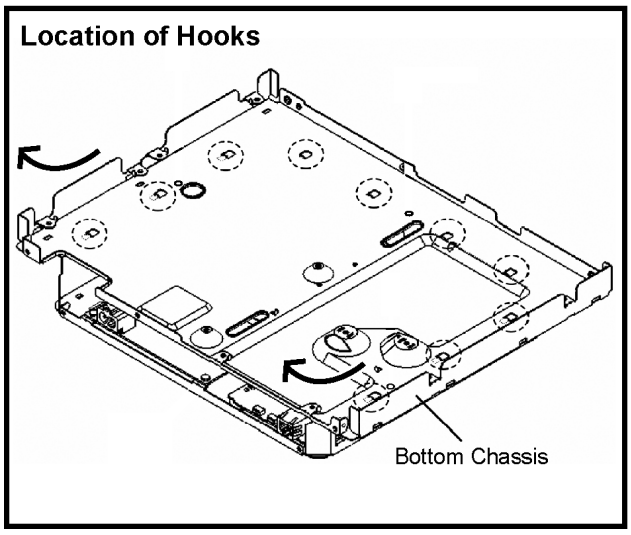
Step 3 Remove 3 screws and the fuse plate from the rear panel.



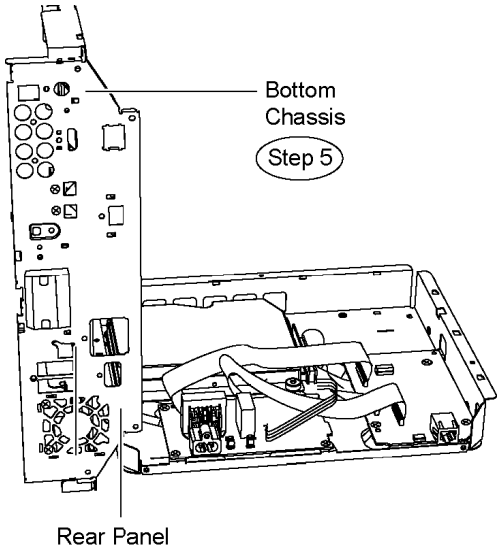
Caution: Keep the fuse plate in safe place. Place it back to its original location during assembling.

Step 4 Detach the hooks by pushing the bottom chassis in the direction of arrows.





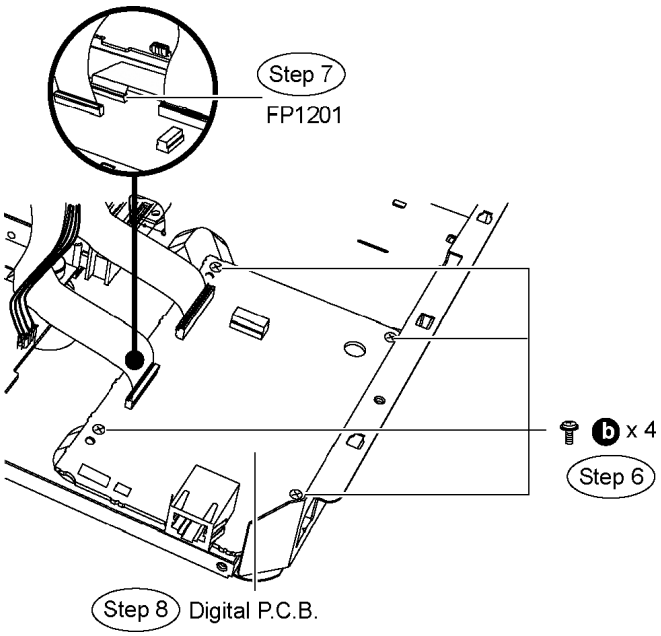
Step 5 Flip the bottom chassis with rear panel vertically and position it according to the diagram shown.



Step 6 Remove 4 screws from Digital P.C.B.

Step 7 Detach FFC cable from the connector (FP1201) on Digital P.C.B.

Step 8 Remove Digital P.C.B.

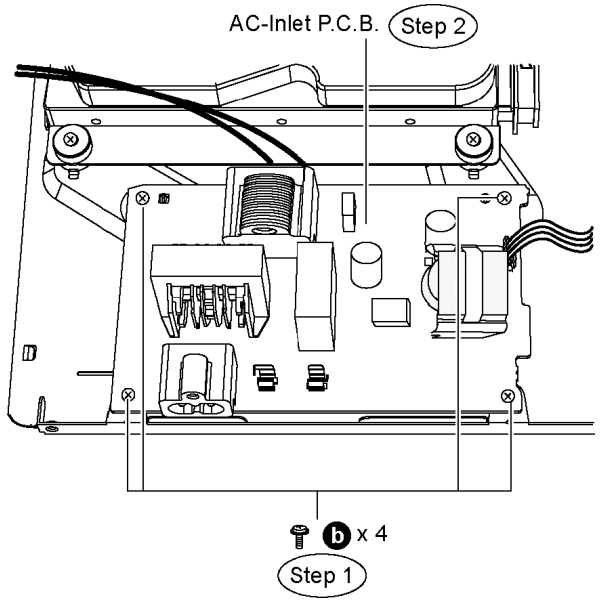


11.23. Disassembly of AC-Inlet P.C.B.

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 4) to (Step 6) of Item 11.20. for disassembly of Slide Plate R.
- Follow (Step 1) to (Step 5) of Item 11.22.

Step 1 Remove 4 screws from AC-Inlet P.C.B.

Step 2 Remove AC-Inlet P.C.B.



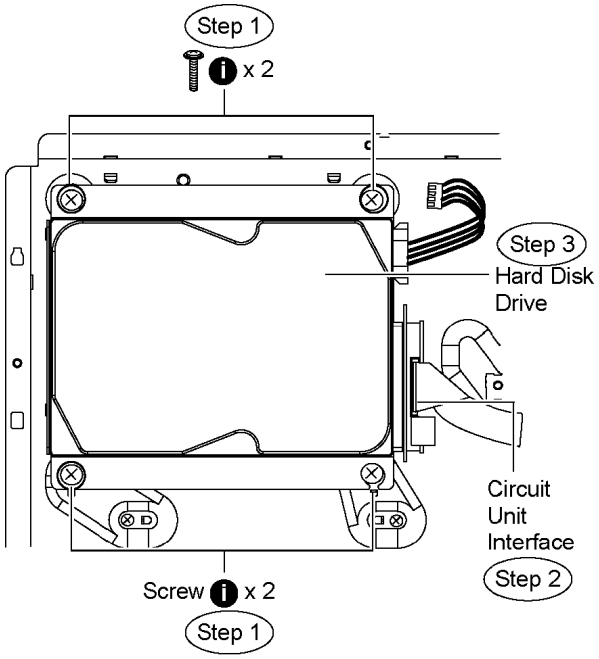
11.24. Disassembly of Hard Disk Drive (HDD)

- Follow (Step 1) to (Step 3) of Item 11.3.
- Follow (Step 1) to (Step 2) of Item 11.4.
- Follow (Step 1) to (Step 4) of Item 11.5.
- Follow (Step 1) to (Step 9) of Item 11.7.
- Follow (Step 4) to (Step 6) of Item 11.20. for disassembly of Slide Plate R.
- Follow (Step 1) to (Step 5) of Item 11.22.

Step 1 Remove 4 screws from the hard disk drive.

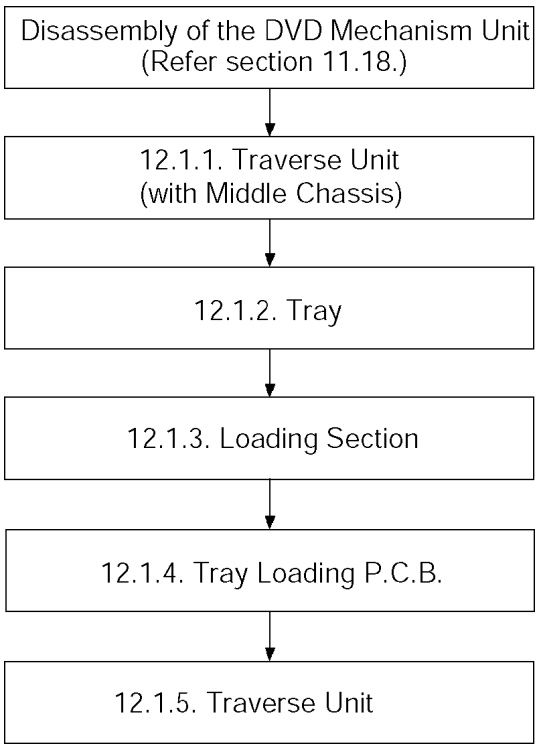
Step 2 Detach FFC cable from the circuit unit interface.

Step 3 Remove the hard disk drive.



12 Assembly and disassembly of DVD Mechanism Unit

12.1. Disassembly Procedure

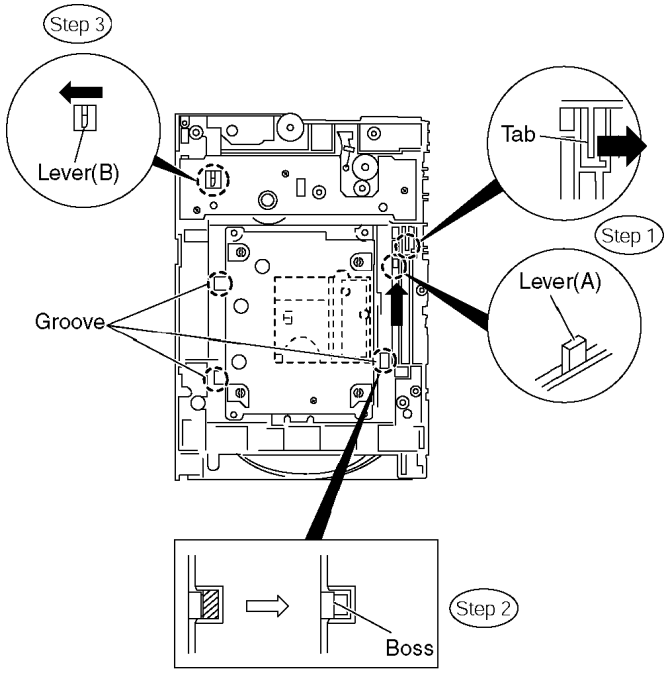


12.1.1. Disassembly of Traverse Unit (with Middle Chassis)

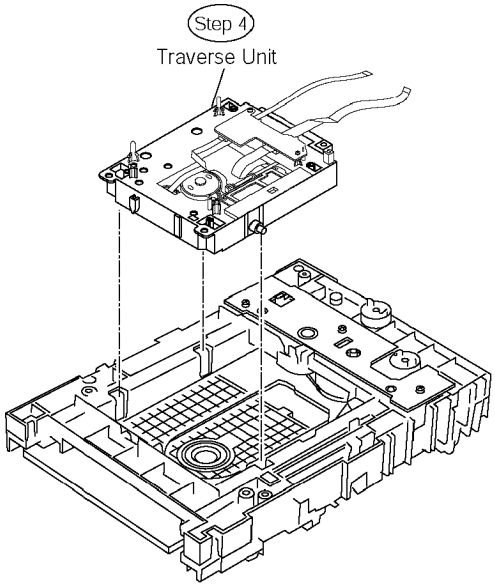
Step 1 Slide the lever (A) in the arrow direction (to the opposite side) till it stops.

Step 2 Slide the lever (A) further by bending the tab at the right side of the lever A in the right direction. (The right groove opens and the boss becomes seen.)

Step 3 Open the lever (B) to left. (The 2 grooves at the left side open.).

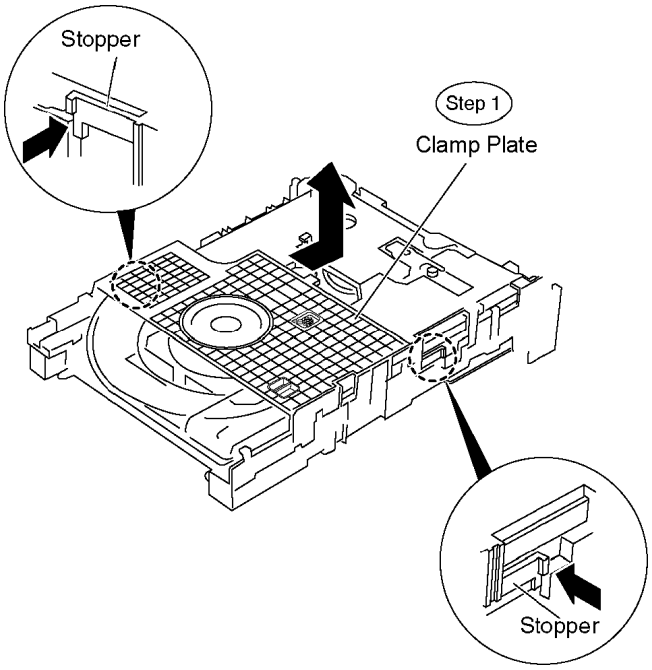


Step 4 Remove the traverse unit.



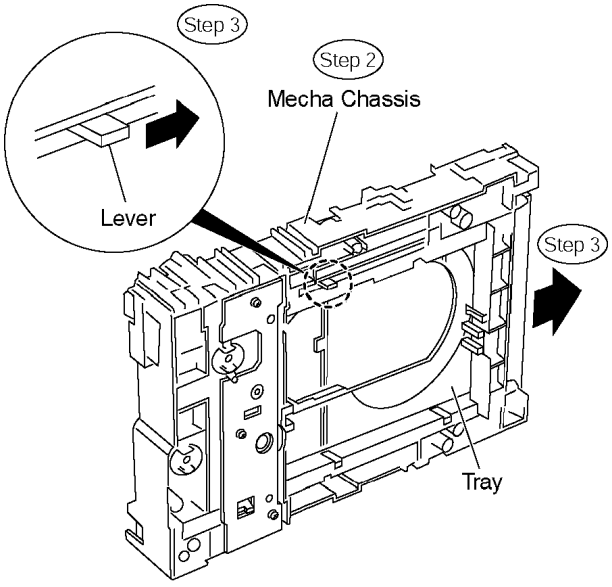
12.1.2. Disassembly of Tray

Step 1 Slide the clamp plate while pressing the stopper in the arrow direction, and remove the clamp plate.

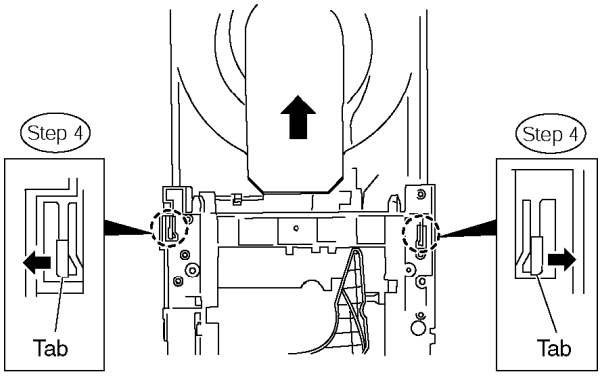


Step 2 Raise the mecha chassis vertically.

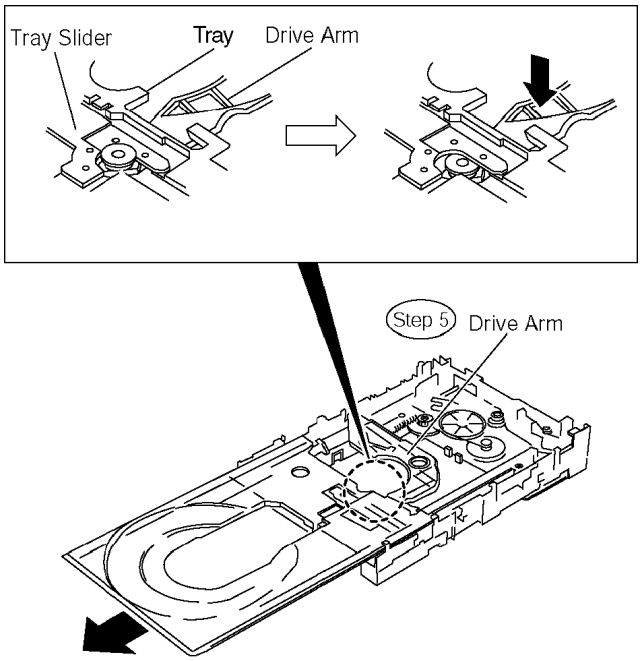
Step 3 Slide the lever in the arrow direction till it stops and pull the tray out.



Step 4 Spread the tabs at the both sides and pull the tray out. (The tray slides a little forword and stops.).



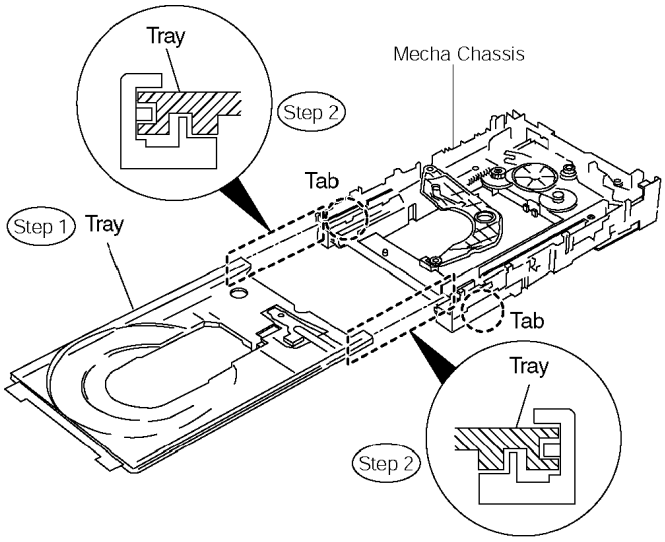
Step 5 Remove the drive arm concave phase from the tray slider and tray.



●(Assembly of the tray unit)

Step 1 Insert a part of the tray into the unit sliding over the groove on the mecha chassis.

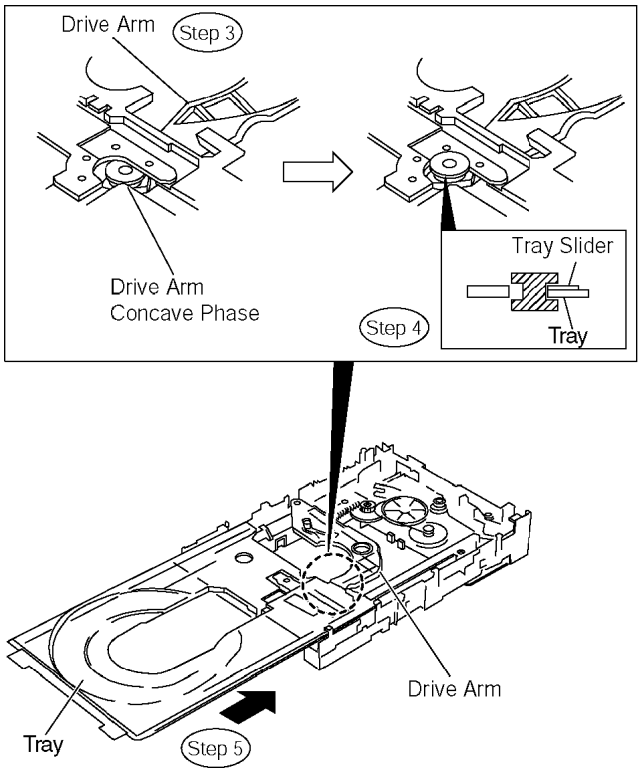
Step 2 Insert the tray to the point before the tab of the mecha chassis.



Step 3 Hook the drive arm concave phase over the tray and the tray slider.

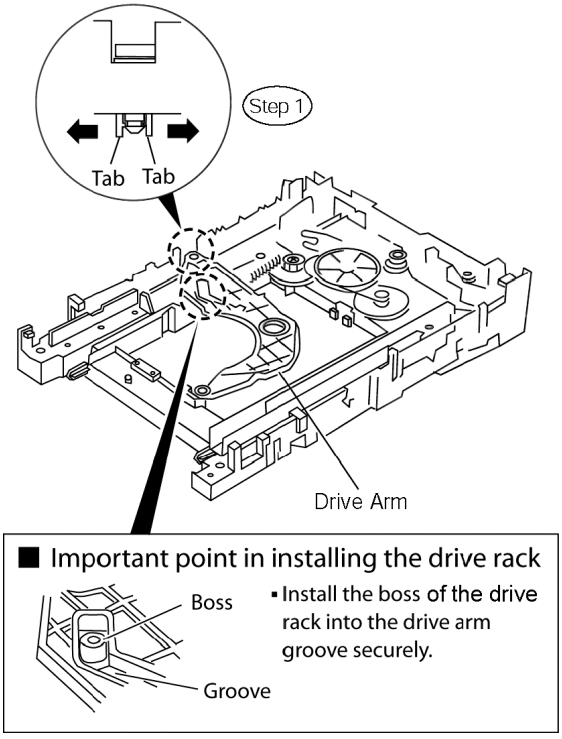
Step 4 Press in the tray.

Step 5 Make sure that the tray and the drive arm move smoothly.



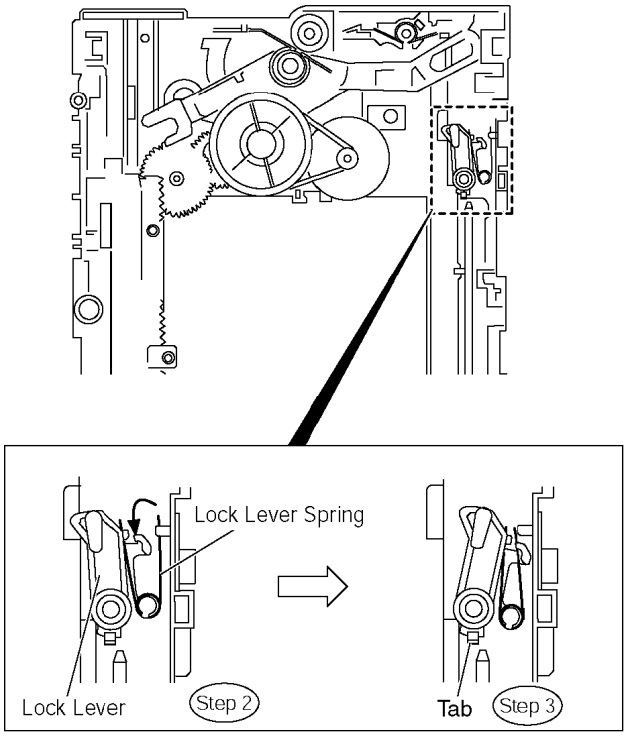
12.1.3. Disassembly of Loading Section

Step 1 Spread the tabs at the both sides and push out the drive arm.



Step 2 Hook the lock lever spring on the lock lever projection part temporarily.

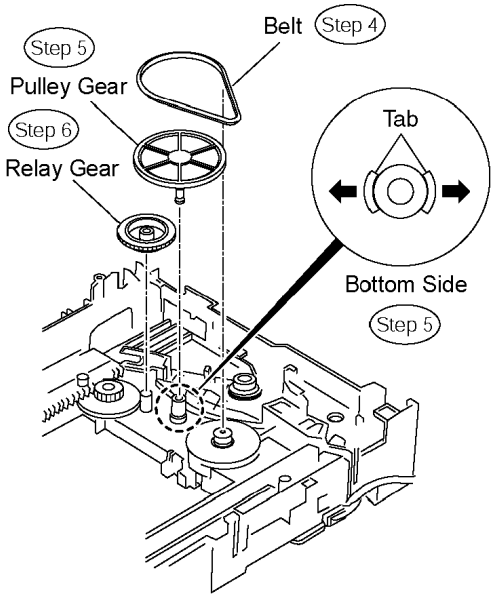
Step 3 Unlock the tab and remove the lock lever.



Step 4 Remove the belt.

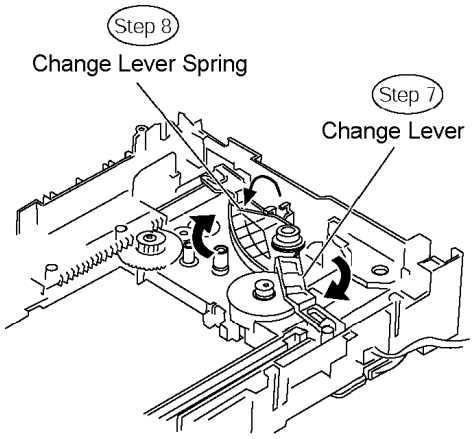
Step 5 Unlock the tab and remove the pulley gear.

Step 6 Remove the relay gear.

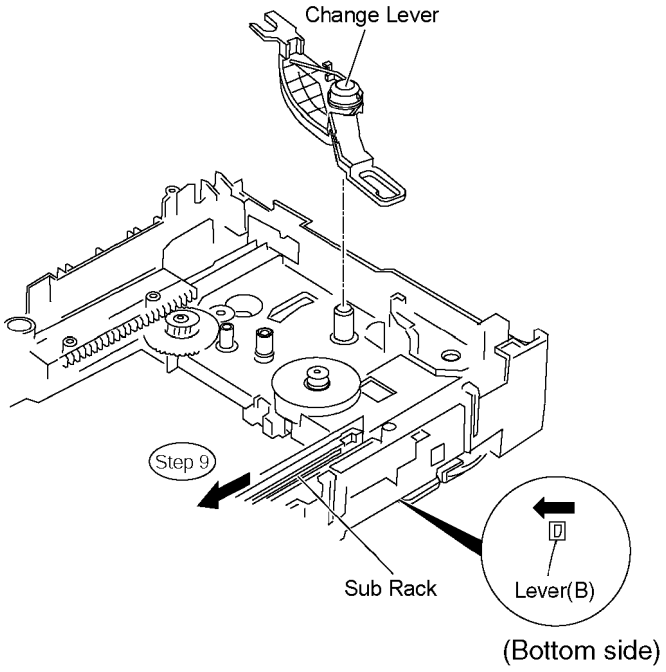


Step 7 Turn the change lever in the arrow direction till it stops.

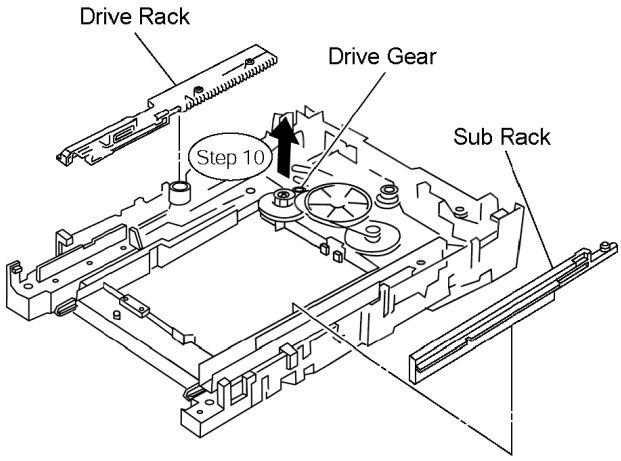
Step 8 Hook the change lever spring on the change lever project part temporarily.



Step 9 Pull the lever (B) at the bottom side in the direction of arrow and remove the change lever.



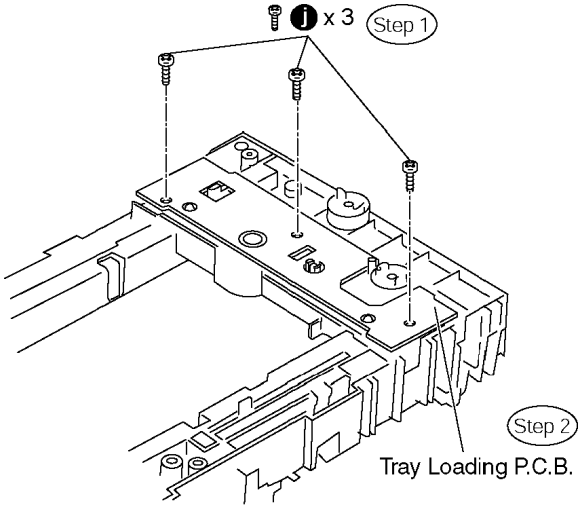
Step 10 Remove the drive rack, the sub rack and the drive gear in the direction of arrow.



12.1.4. Disassembly of Tray Loading P.C.B.

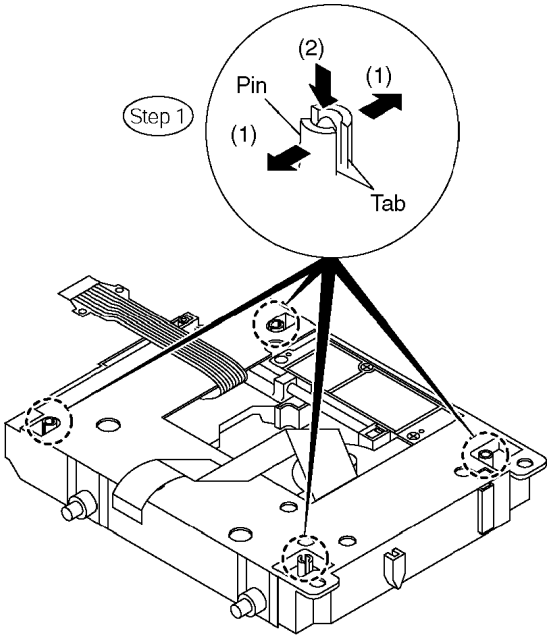
Step 1 Remove 3 screws

Step 2 Remove Tray Loading P.C.B.

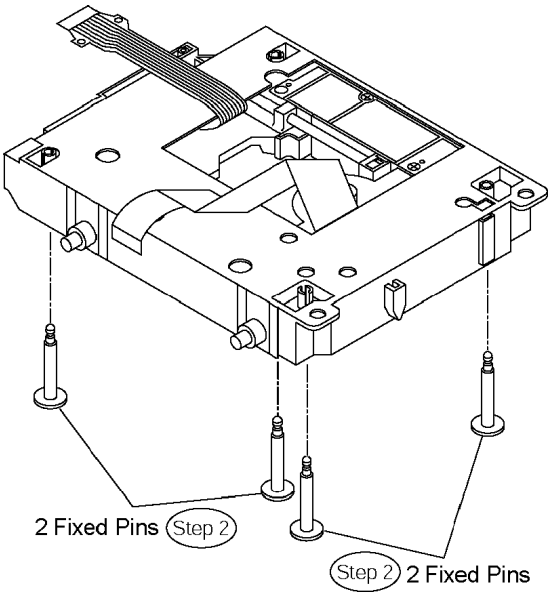


12.1.5. Disassembly of Traverse Unit

Step 1 Spread the tabs to push in the pin in the direction of arrows.

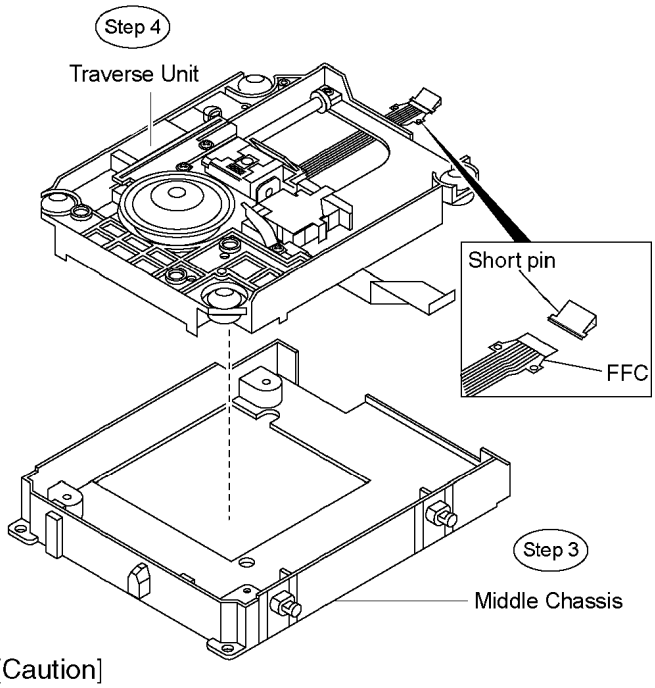


Step 2 Remove 4 fixed pins.



Step 3 Remove the middle chassis.

Step 4 Remove the traverse unit.



[Caution]

Insert the short pin into the FFC of the optical pickup unit. [See "Caution to be taken in handling the optical pickup unit"]

13 Service Fixture and Tools

Prepare service tools before proccess service position.

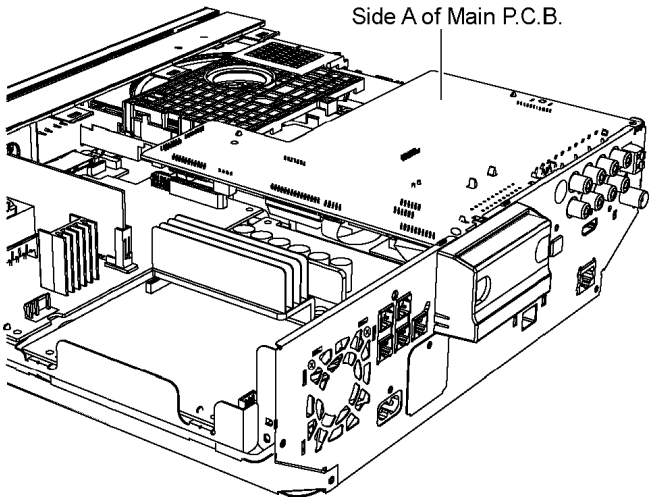
Service Tools		Remarks
Power P.C.B. - Hard Disk Drive	RFKZ0339 (4 pin wire)	[SPG]
DVD Module P.C.B. - Digital P.C.B.	RFKZ0431 (50 pin FFC cable)	[M]
Main P.C.B. - Digital P.C.B.	RFKZ0432 (28 pin FFC cable)	[M]
Main P.C.B. - AC-Inlet P.C.B.	RFKZ0433 (4 pin wire)	[M]

14 Service Positions

14.1. Checking & Repairing Main P.C.B.

• Servicing Side A of Main P.C.B.

Step 1 Remove the top cover assembly & top shield to service the side A of Main P.C.B.



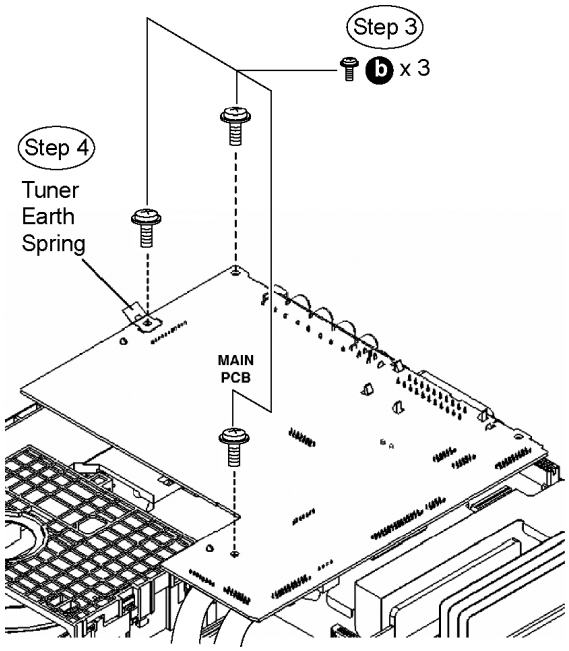
Note: Side A of DVD Module P.C.B. can be checked at its original position.

• Servicing Side B of Main P.C.B.

Step 2 Remove the slide plate L.

Step 3 Remove 3 screws from Main P.C.B.

Step 4 Remove the tuner earth spring.

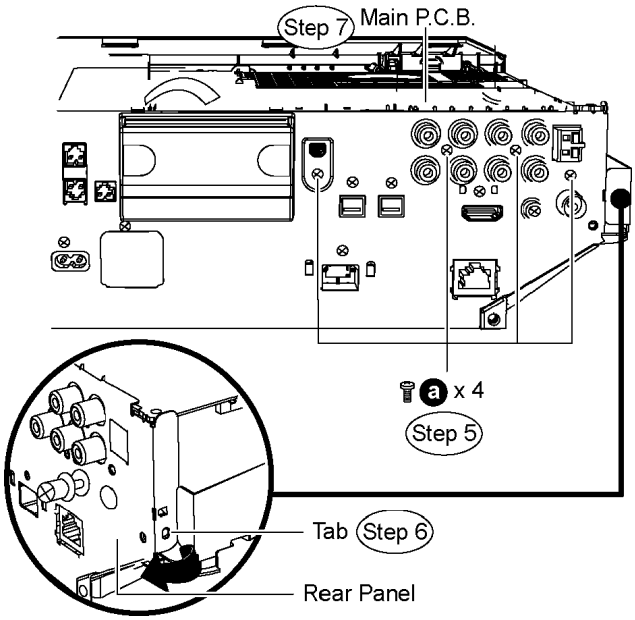


Caution Note: Keep the tuner earth spring in safe place. Avoid denting the spring. Place the tuner earth spring back during assembling.

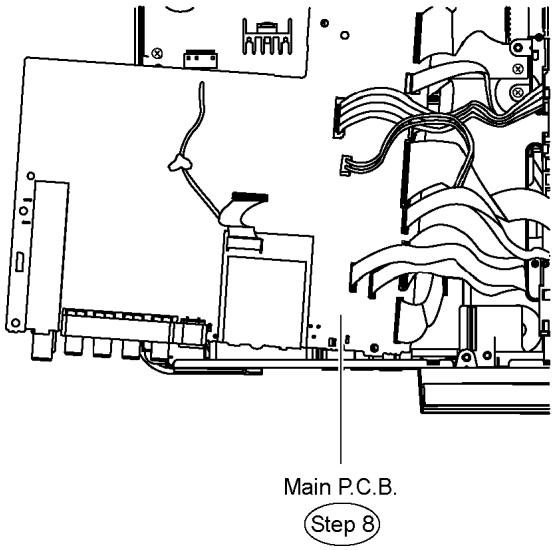
Step 5 Remove 4 screws from the rear panel.

Step 6 Release the tab of the rear panel in the direction of arrow.

Step 7 Remove Main P.C.B. from the rear panel.



Step 8 Flip Main P.C.B. to another side horizontally and position it according to the diagram shown.



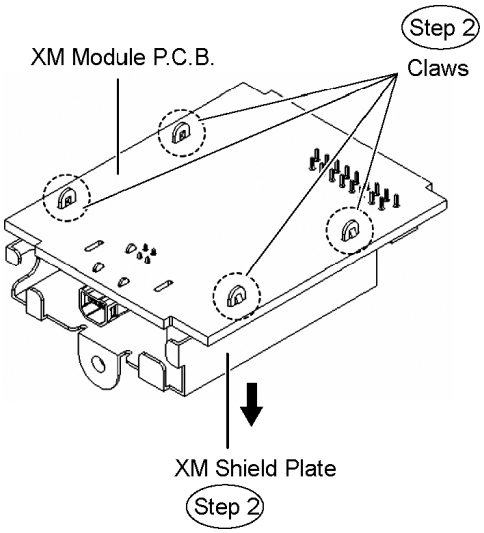
Note Insulate Main P.C.B. from other parts with insulating material (eg. plastic).

14.2. Checking & Repairing XM Module P.C.B.

• Follow (Step 1) to (Step 8) of Item 14.1.

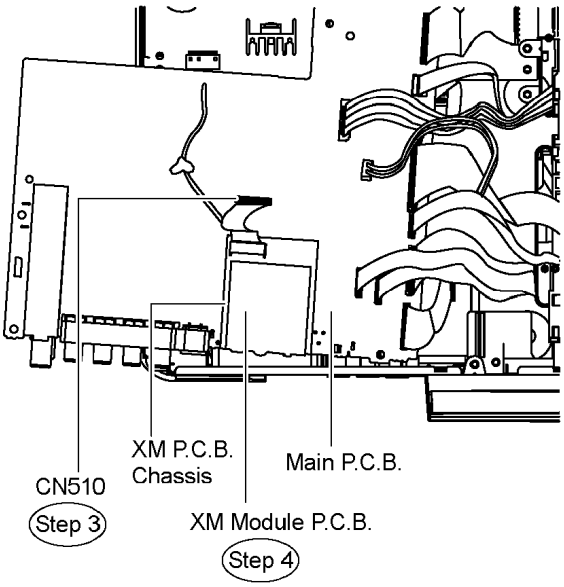
Step 1 Disassemble XM Module P.C.B. [Refer to (Step 1) to (Step 3) of Item 11.8. for its disassembly procedures).

Step 2 Desolder the claws and remove the XM shield plate in the direction of arrow.



Step 3 Connect FFC cable at the connector (CN510) on Main P.C.B.

Step 4 Attach XM Module P.C.B. back to XM P.C.B. chassis in its original position.

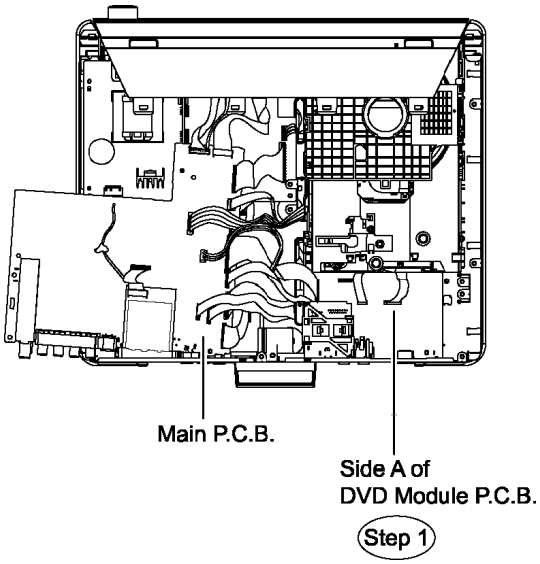


14.3. Checking & Repairing DVD Module P.C.B.

• Follow (Step 1) to (Step 8) of Item 14.1.

• Servicing Side A of DVD Module P.C.B.

Step 1 Follow (Step 1) to (Step 9) of "Checking & Repairing Main P.C.B." in order to service the side A of DVD Module P.C.B.



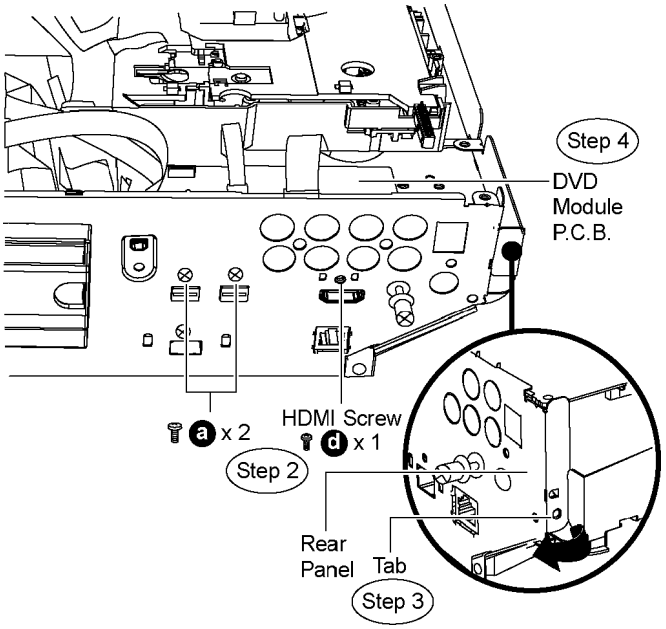
Note: Side A of DVD Module P.C.B. can be checked at its original position.

• Servicing Side B of DVD Module P.C.B.

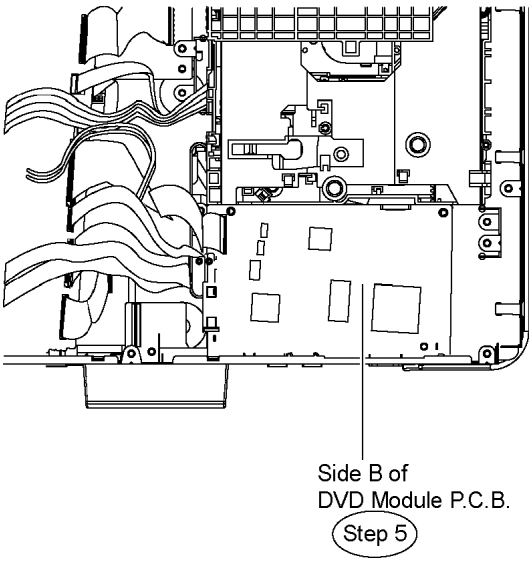
Step 2 Remove 3 screws from the rear panel.

Step 3 Release the tab of the rear panel in the direction of arrow.

Step 4 Remove DVD Module P.C.B. from the rear panel.



Step 5 Flip DVD Module P.C.B. to the side B vertically and position it according to diagram shown.



Note Insulate DVD Module P.C.B. from other parts with insulating material (eg. plastic).

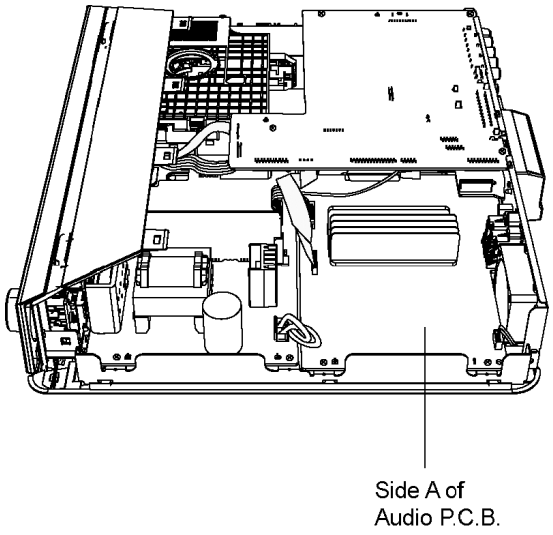
14.4. Checking & Repairing Audio P.C.B.

- Servicing Side A of Audio P.C.B.

Step 1 Remove the top cover assembly.

Step 2 Remove the top shield.

Note: Side A of Audio P.C.B. can be checked at its original position.



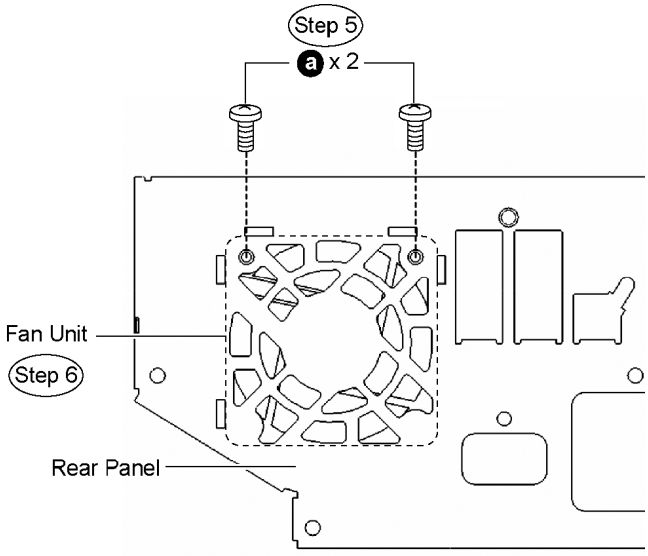
- Servicing Side B of Audio P.C.B.

Step 3 Disassemble the rear panel.

Step 4 Disassemble Wireless Adapter P.C.B.

Step 5 Remove 2 screws from the rear panel.

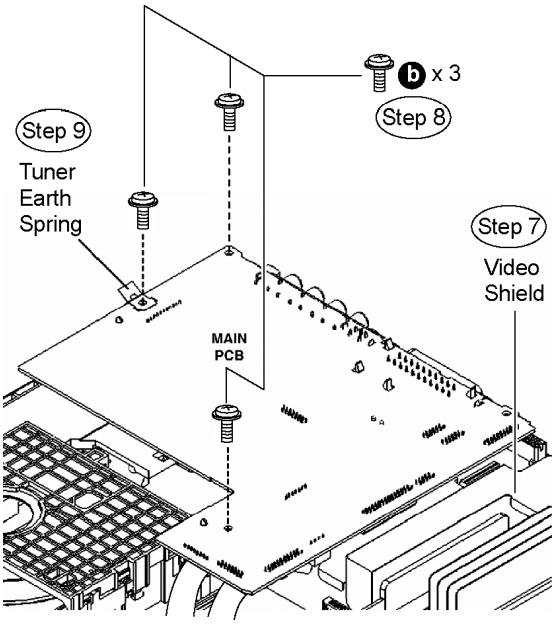
Step 6 Remove the fan unit.



Step 7 Remove the video shield.

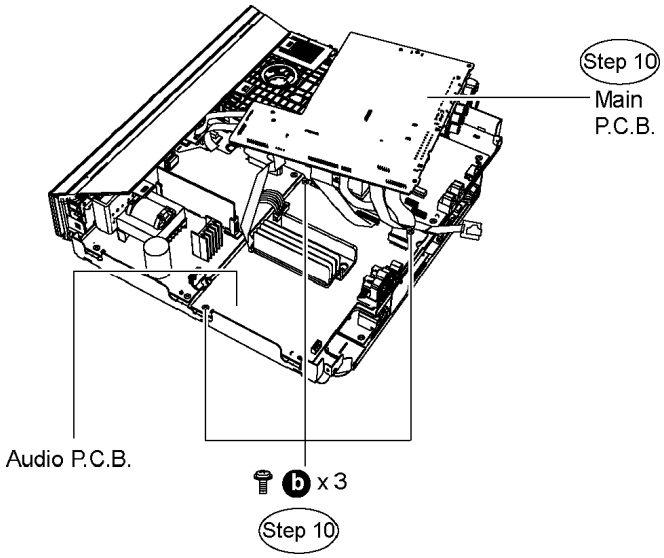
Step 8 Remove 3 screws from Main P.C.B.

Step 9 Remove the tuner earth spring.



Caution Note: Keep the tuner earth spring in safe place. Avoid denting the spring. Place the tuner earth spring back during assembling.

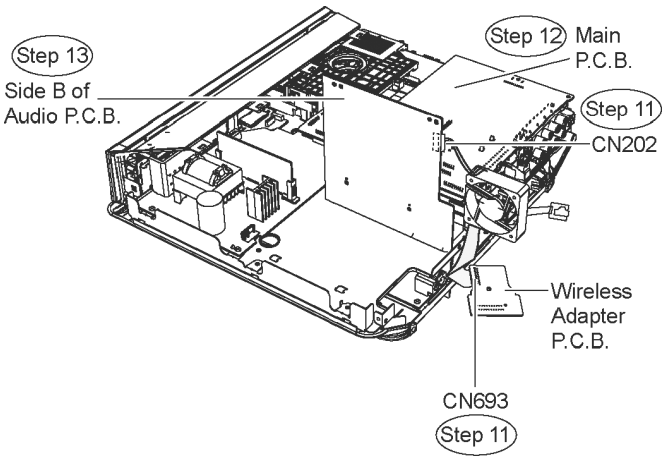
Step 10 Move aside Main P.C.B. in order to remove 3 screws from Audio P.C.B.



Step 11 Connect cables at the connectors (CN693) on Wireless Adapter P.C.B. and (CN202) on Audio P.C.B.

Step 12 Place Main P.C.B. to its original position.

Step 13 Flip Audio P.C.B. to the side B vertically and position it according to the diagram shown.

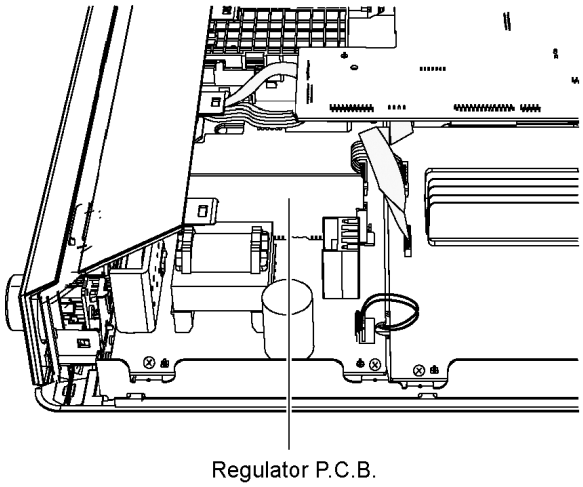


Note Insulate Audio P.C.B. from other parts with insulating material (eg. plastic).

14.5. Checking & Repairing Regulator P.C.B.

Step 1 Remove the top cover assembly.

Step 2 Remove the top shield.



Note: Regulator P.C.B. can be checked at its original position.

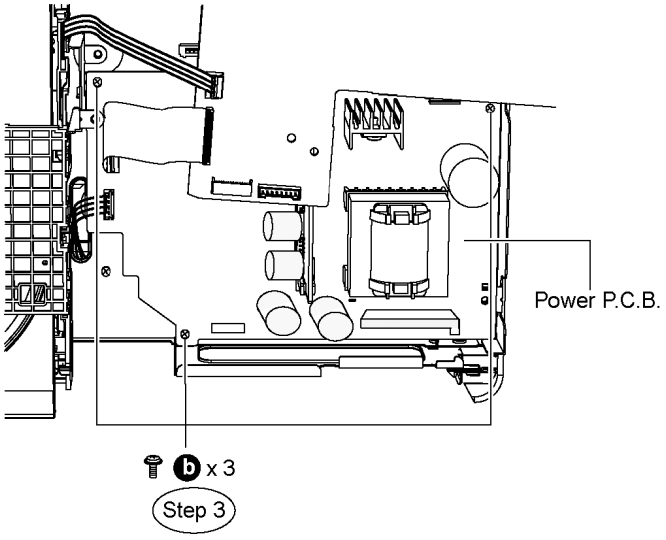
14.6. Checking & Repairing Power P.C.B.

- Follow (Step 1) to (Step 8) of Item 14.1.

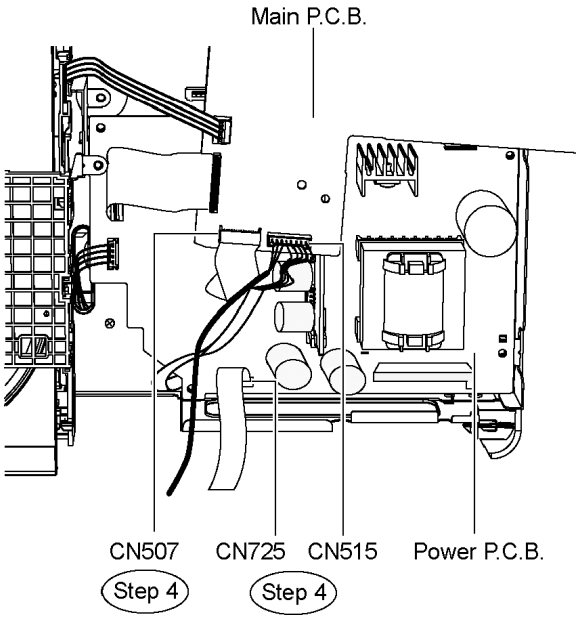
Step 1 Disassemble the front panel.

Step 2 Disassemble Panel P.C.B., Tact-1 P.C.B. & Tact-2 P.C.B.

Step 3 Remove 3 screws from Power P.C.B.

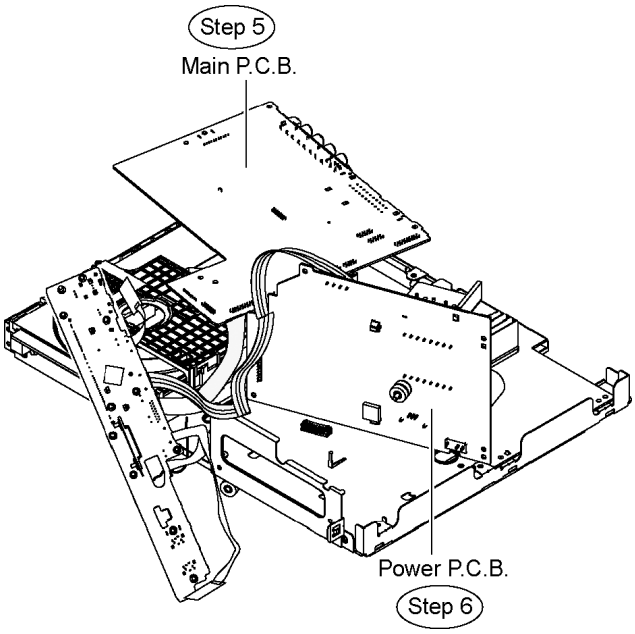


Step 4 Connect cables at the connectors (CN725) on Power P.C.B. and (CN507 & CN515) on Main P.C.B.



Step 5 Flip Main P.C.B. to another side and place it in original position as the diagram shown.

Step 6 Flip Power P.C.B. to another side vertically and position it according to the diagram shown.



Note Insulate Power P.C.B. from other parts with insulating material (eg. plastic).

14.7. Checking & Repairing Panel P.C.B.

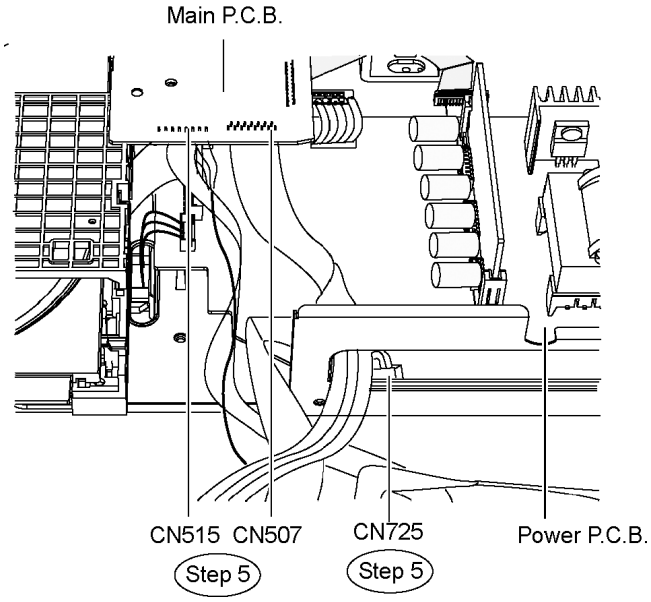
Step 1 Remove the top cover assembly.

Step 2 Remove the top shield.

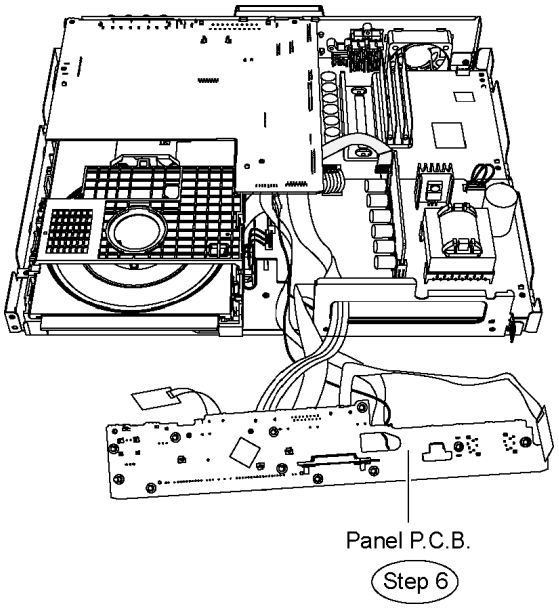
Step 3 Disassemble the front panel.

Step 4 Disassemble Panel P.C.B., Tact-1 P.C.B. and Tact-2 P.C.B.

Step 5 Connect cables at the connectors (CN725) on Power P.C.B. and (CN507 & CN515) on Main P.C.B.



Step 6 Flip Panel P.C.B. to another side horizontally and position it according to the diagram shown.



14.8. Checking & Repairing Digital P.C.B.

- Follow (Step 1) to (Step 8) of Item 14.1.

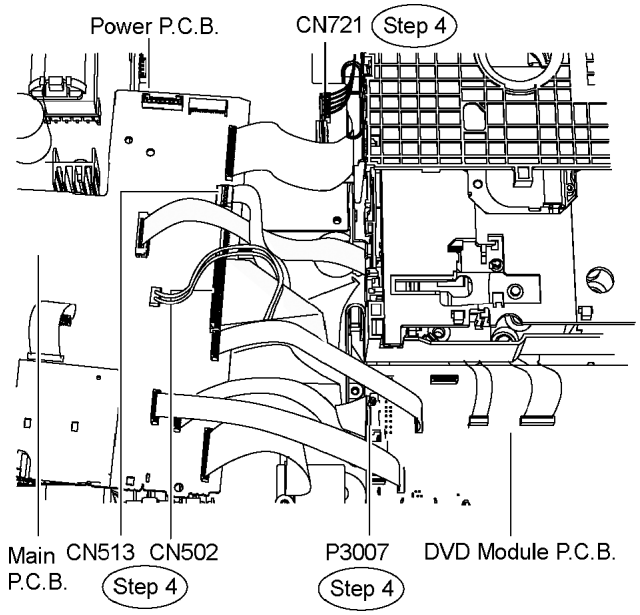
Step 1 Remove the slide plate R.

Step 2 Disassemble the front panel.

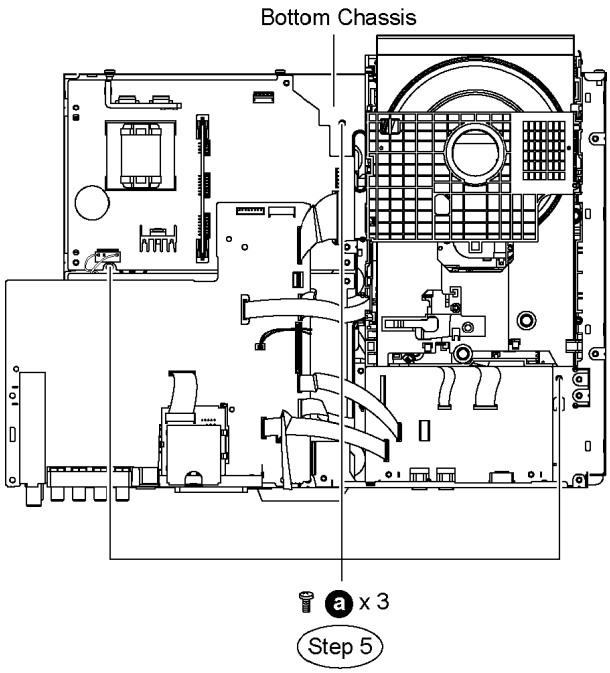
Step 3 Disassemble Panel P.C.B., Tact-1 P.C.B. and Tact-2 P.C.B.

- Servicing Side A of Digital P.C.B.

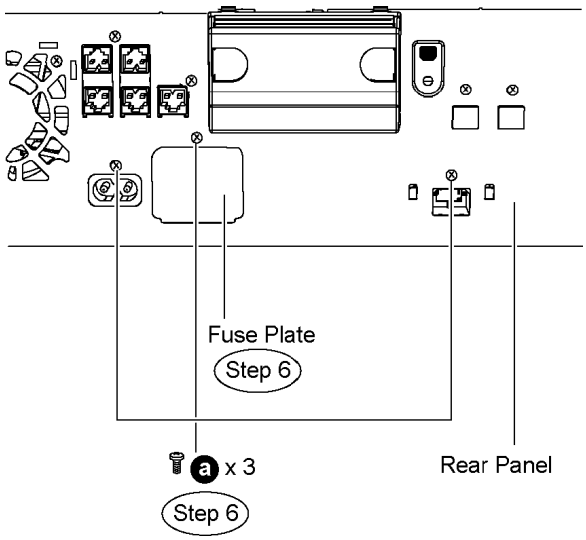
Step 4 Detach cables from the connectors (CN721) on Power P.C.B. and (CN502 & CN513) on Main P.C.B. and (P3007) on DVD Module P.C.B.



Step 5 Remove 3 screws from the bottom chassis.

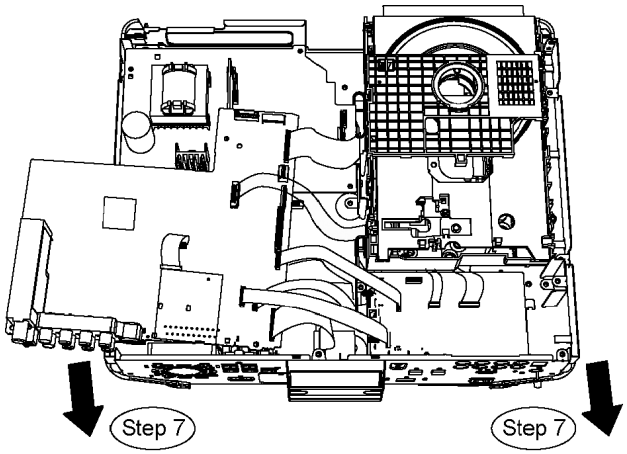


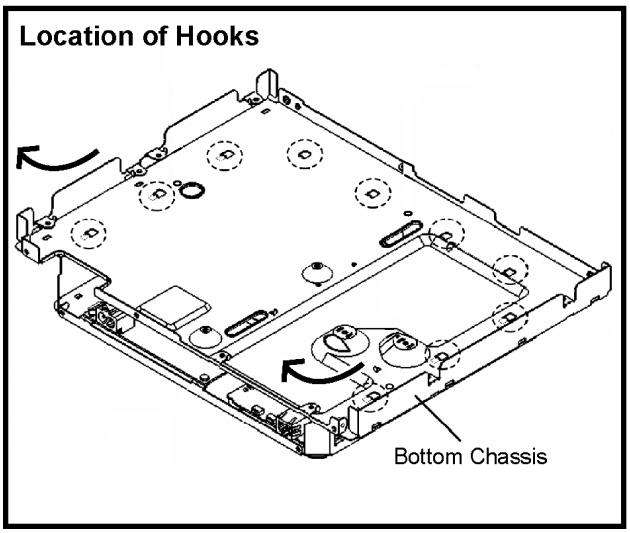
Step 6 Remove 3 screws and the fuse plate from the rear panel.



Caution: Keep the fuse plate in safe place. Place it back to its original location during assembling.

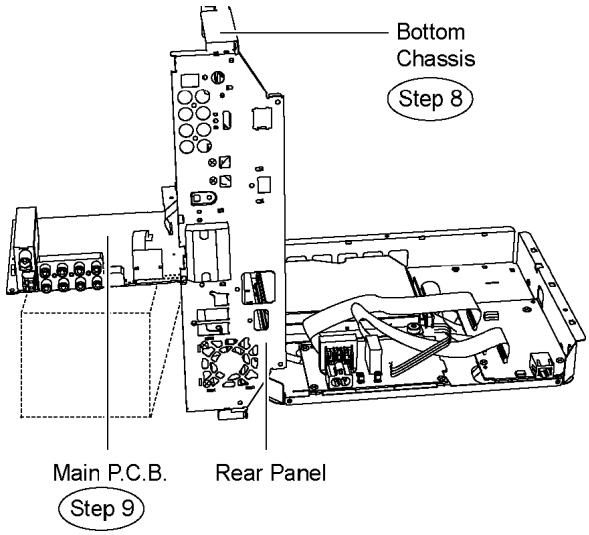
Step 7 Detach the hooks by pushing the bottom chassis in the direction of arrows.





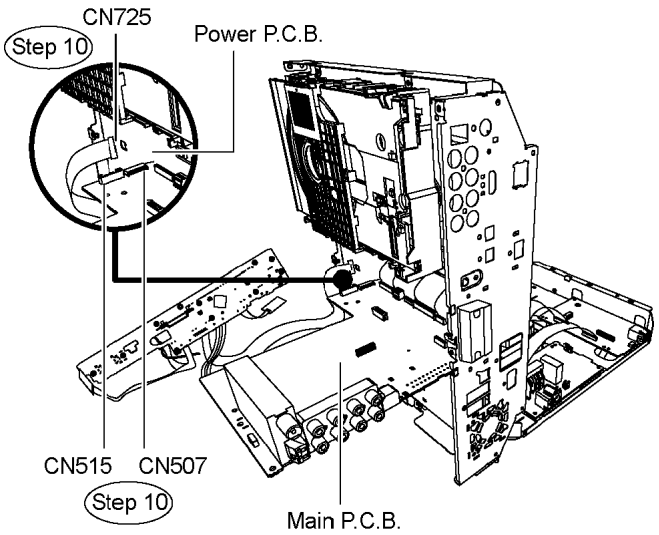
Step 8 Flip the bottom chassis with rear panel vertically and position it according to the diagram shown.

Step 9 Position Main P.C.B. according to the diagram shown.

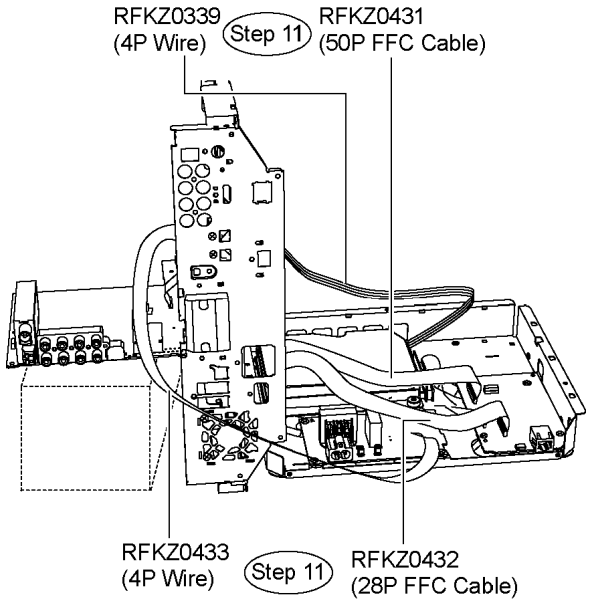


Note: An object (eg. box) can be placed beneath Main P.C.B. to adjust its position height.

Step 10 Connect cables at the connectors (CN725) on Power P.C.B. and (CN507 & CN515) on Main P.C.B.

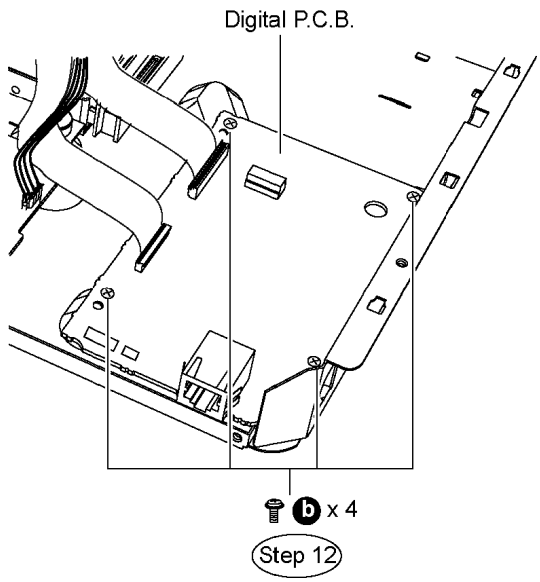


Step 11 Replace original cables with extended cables RFKZ0339 (4P wire, from CN721 to the hard disk drive), RFKZ0431 (50P FFC cable, from CN1503 to P3007), RFKZ0432 (28P FFC cable, from CN502 to CN1900) and RFKZ0433 (4P wire, from CN513 to P702).

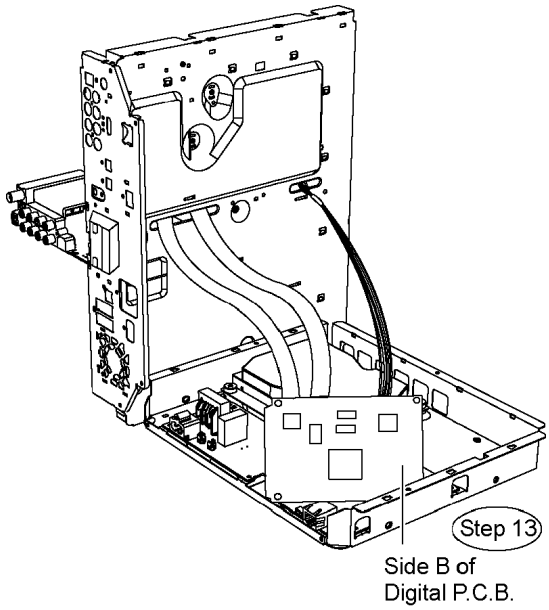


- Servicing Side B of Digital P.C.B.

Step 12 Remove 4 screws from Digital P.C.B.



Step 13 Flip Digital P.C.B. to the side B vertically and position it according to the diagram shown.



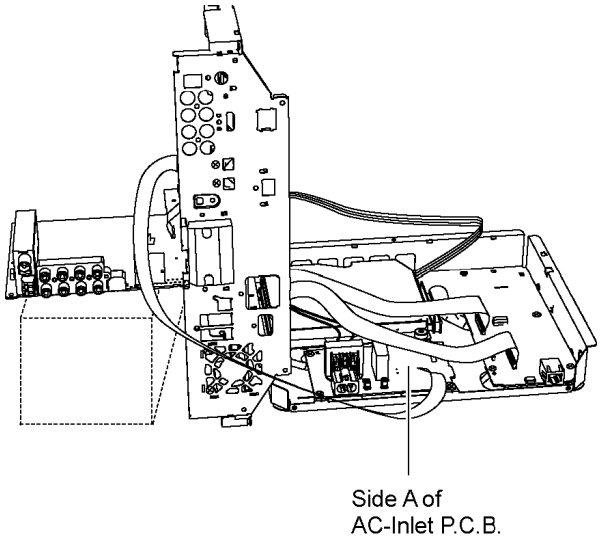
Note Insulate Digital P.C.B. from other parts with insulating material (eg. plastic).

14.9. Checking & Repairing AC-Inlet P.C.B.

- Follow (Step 1) to (Step 11) of Item 14.8.

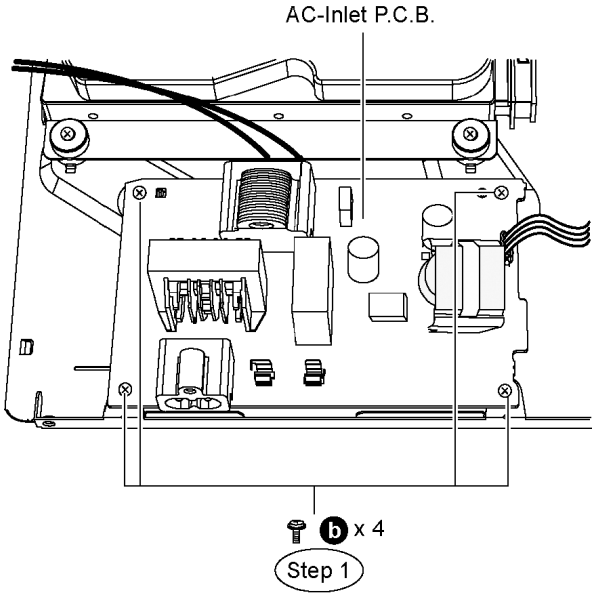
- Servicing Side A of AC-Inlet P.C.B.

Note: Side A of AC-Inlet P.C.B. can be checked at its original position. (Refer to the diagram shown)

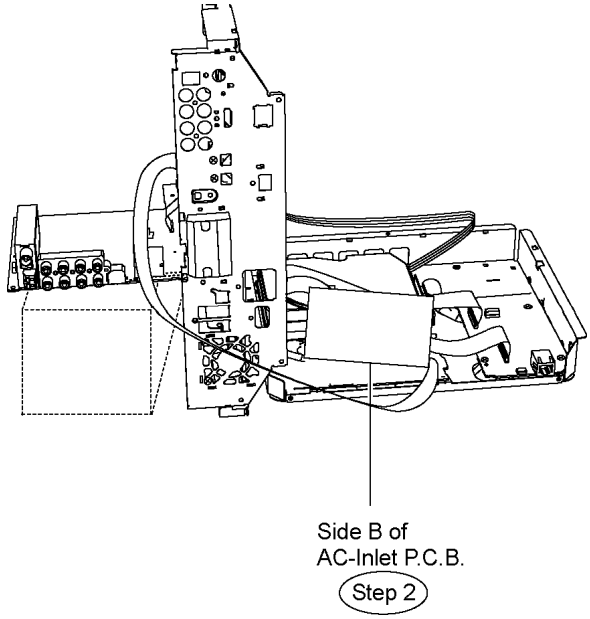


- Servicing Side B of AC-Inlet P.C.B.

Step 1 Remove 4 screws from AC-Inlet P.C.B.



Step 2 Flip AC-Inlet P.C.B. to the side B vertically and position it according to the diagram shown.



Note Insulate AC-Inlet P.C.B. from other parts with insulating material (eg. plastic).

15 Measurements and Adjustments

15.1. Service Tools and Equipment

Application	Name	Number
Tilt adjustment	DVD test disc	DVDT-S20 [SPG]
	TORX screw driver (T6)	Available on sales route. (T6) or RFKZ0185 [SPG]
Others	Grease	RFKXPG641 [SPG]
Confirmation	CD test disc	PVCD-K06 or any other commercially available disc
	VCD test disc	PVCD-K06 or any other commercially available disc
	Recovery disc	RFKZD03R005 [SPG]

15.2. Important points in adjustment

15.2.1. Important points in optical adjustment

- Before starting optical adjustment, be sure to take anti-static measures.
- Optical pickup tilt adjustment is needed after replacement of the following components.

1. Optical pickup unit
2. Spindle motor unit
3. Optical pickup peripheral parts

Notes

Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, make adjustment if there is a noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pickup. Adjustment is generally unnecessary after replacing the traverse unit.

15.2.2. Important points in electrical adjustment

- Follow the adjustment procedures described in this manual.

15.3. Storing and handling of test discs

- Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.

1. Do not place discs directly onto the workbench, etc., after use.
2. Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in a cool place where they are not exposed to direct sunlight or air from air conditioners.
3. Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass, etc. If this happens, use a new test disc to make optical adjustments.
4. If adjustment is done using a warped disc, the adjustment will be incorrect and some discs will not be playable.

15.4. Optical adjustment

15.4.1. Optical pickup tilt adjustment

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T01 (inner periphery) play T30 (center periphery) T43 (outer periphery) play	DVDT-S20 [SPG]
Measuring equipment		Adjustment value	
None (Main unit display for servicing is used.)		Adjust to the minimum jitter value.	

15.4.1.1. Adjustment procedure

1. While pressing STOP button on the main unit, press "5" on the remote control unit.
2. Confirm that "J_xxx/yyy_zz" (Display 1/Display 2) is shown on the front display.

   For your information:

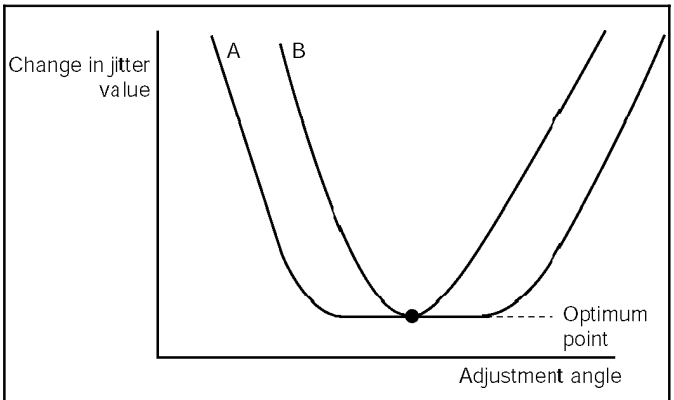
   "yyy" and "zz" have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focus drive value.

   Note:

   Jitter value appears on the front display.
3. Play test disc T30 (center periphery).
4. Adjust tangential adjustment screw so that the jitter value is minimized.
5. Play test disc T30 (center periphery).
6. Adjust tilt adjustment screw 1 so that the jitter value is minimized.
7. Play test disc T30 (center periphery).
8. Adjust tilt adjustment screw 2 so that the jitter value is minimized.
9. Repeat adjusting tilt adjustment screws 1 and 2 alternately until the jitter value is minimized.

15.4.1.2. Important points

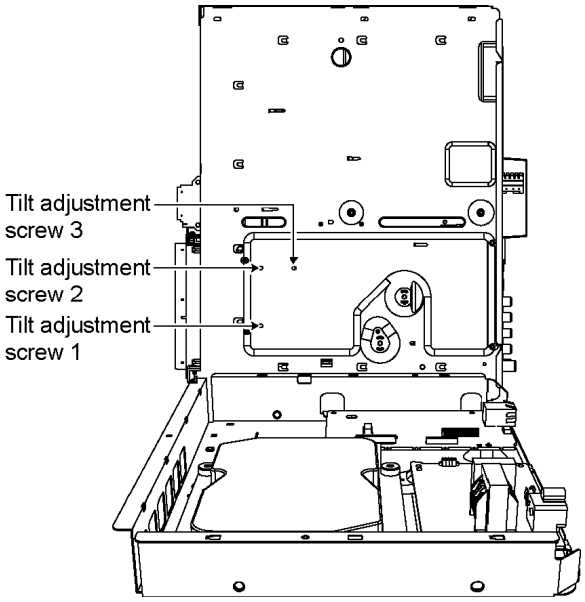
1. Make tangential adjustment first, and then make tilt adjustment.
2. Repeat adjusting two or three times to find the optimum point.
3. Finish the procedure with tilt adjustment.



Jitter value depends on the model:

1. If the jitter value changes like B, the optimum point is easy to find.
2. If the jitter value changes like A, set the optimum point near the middle.

Note : Tilt adjustment can be done through disassembly of the mechanism unit. Follow (Step1) to (Step4) of Item 11.18. for its disassembling procedures.

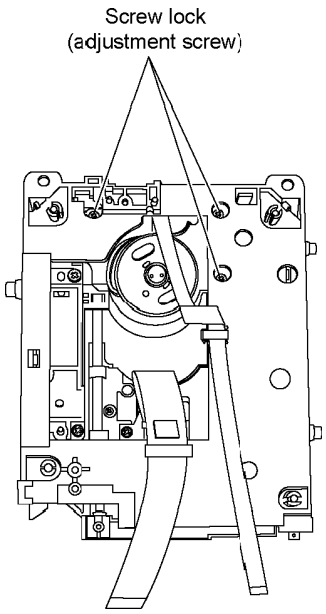


15.4.1.3. Check after adjustment

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment screw in position using screw lock.

15.4.1.4. Procedure for screw lock

1. After adjustment, remove top cover, tray, clamper base and traverse unit in this sequence.
2. Lay the traverse unit upside down, and fix adjustment screw with screw lock.
3. After fixing, reassemble traverse unit, clamper base, tray and top cover.


Screw lock
(adjustment screw)

16 Abbreviations

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVO AMP OUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCK SELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIP SELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	DIGITAL MUTE CONTROL
	DO	DROP OUT
	DOUT0~UP	DATA OUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC

INITIAL/LOGO		ABBREVIATIONS
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
	FSCK	FS (384 OVER SAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	INTERPOLATION FLAG
	IREF	I (CURRENT) REFERENCE
	ISEL	INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORY SERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVE A
	PWMOA, B	PULSE WAVE MOTOR OUT A, B

INITIAL/LOGO		ABBREVIATIONS
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE OUTPUT
	RS	(CD-ROM) REGISTER SELECT
	RSEL	RF POLARITY SELECT
	RST	RESET
	RSV	RESERVE
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK RECEIVER
	SCL	SERIAL CLOCK
	SCLK	SERIAL CLOCK
	SDA	SERIAL DATA
	SEG0~UP	FL SEGMENT OUTPUT
	SELCLK	SELECT CLOCK
	SEN	SERIAL PORT ENABLE
	SIN1, 2	SERIAL DATA IN
	SOUT1, 2	SERIAL DATA OUT
	SPDI	SERIAL PORT DATA INPUT
	SPDO	SERIAL PORT DATA OUTPUT
	SPEN	SERIAL PORT R/W ENABLE
	SPRCLK	SERIAL PORT READ CLOCK
	SPWCLK	SERIAL PORT WRITE CLOCK
	SQCK	SUB CODE Q CLOCK
	SQCX	SUB CODE Q DATA READ CLOCK
	SRDATA	SERIAL DATA
	SRMADR	SRAM ADDRESS BUS
	SRMDT0~7	SRAM DATA BUS 0~7
	SS	START/STOP
	STAT	STATUS
	STCLK	STREAM DATA CLOCK
	STD0~UP	STREAM DATA
	STENABLE	STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY SELECT
	STVALID	STREAM DATA VALIDITY
	SUBC	SUB CODE SERIAL
	SBCK	SUB CODE CLOCK
	SUBQ	SUB CODE Q DATA
	SYSCLK	SYSTEM CLOCK
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSS SIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON

INITIAL/LOGO		ABBREVIATIONS
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING BALANCE)
	VDD	DRAIN POWER SUPPLY VOLTAGE
	VFB	VIDEO FEED BACK
	VREF	VOLTAGE REFERENCE
	VSS	SOURCE POWER SUPPLY VOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER
X	X	X´ TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPT REQUEST
	XI	X´ TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X´ TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIP SELECT
	XVDS	X V-DEC CONTROL BUS STROBE
	XVSYNCO	X VERTICAL SYNC OUTPUT

17 Voltage and Waveform Chart

17.1. DVD Module P.C.B.

Ref No.	IC3201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	0	0	1.6	1.7	1	1.1	3.3	0.3	2.5	0	0.1	0.1	0	0	0.8	1.7	1.7	3.2	0
Ref No.	IC3201																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.1	3.2	3	3.2	0.6	1.8	1.4	1.3	1.3	2	0	1.7	3.3	1.2	1.3	1.7	0.7	0.7	0.5	0.1
Ref No.	IC3201																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	2.5	0.7	0.4	0.1	1.7	1.3	1.3	3.3	3.3	3.3	0	0	1.2	1.8	1.4	2.5	0	1.5	2.3	0.8
Ref No.	IC3201																			
MODE	61	62	63	64																
CD PLAY	0.7	1.1	1.7	0																
Ref No.	IC3251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	1.1	1.1	1.4	1.4	1.6	0.1	0.1	0.1	4.9	4.9	4.9	1.5	1.4	1.4	1.1	4.9				
Ref No.	IC3252																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0.7	0.8	1.1	1.1	1.1	0.1	0.1	0.1	4.9	4.9	4.9	1.5	1.4	1.4	0.7	4.9				
Ref No.	IC3291																			
MODE	1	2	3	4	5															
CD PLAY	3.4	3.4	2.5	-	0															
Ref No.	IC3901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	-	-	-	-	1.2	0.8	0	2.9	3.3	0	0	0	3.3	0	0	0	3.3	0	0	0
Ref No.	IC3901																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	0	0	0	3.3	1.2	0	3.3	-	-	-	-	1.6	3.3	0.9	0	0	0.9	0	3.3
Ref No.	IC3901																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	1.7	1.2	1.7	0	1.6	0	1.2	0	0	0	0	3.3	5	3	5	7	0	-	-	0
Ref No.	IC3901																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	-	0	-	-	0	0	0	0	3.3	0	0	0	0	0	0	0	0	0	0
Ref No.	IC3901																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	3.3	1.2	0	1.1	0.7	0.8	2.3	0	1.4	1.4	1.7	1.2	-	-	-	-	0	3.3
Ref No.	IC3901																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	1.2	0	0	0	3.3	3.3	3.3	1.2	0	1.4	0	3.3	3.2	3.3	1.2	1.5	0	0	3.3
Ref No.	IC3901																			
MODE	121	122	123	124	125	126	127	128												
CD PLAY	3.3	0	1.2	3.3	0	0.7	0	0												
Ref No.	IC3952																			
MODE	1	2	3	4	5															
CD PLAY	1.3	0	8.3	8.9	5															

Ref No.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0.1	0	3.3	0.1	0.1	0.9	0.6	0.7	2.3	1.4	1.3	0	3.3	1.7	1.1	0	1.2
Ref No.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.8	1.2	0	1.6	1.4	1.2	1.6	1.7	1.8	1.1	3.3	0	3.3	1.6	0.7	1.4	1.7	1.8	1.5	1.6
Ref No.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	2	1.9	0	1.2	0	3.2	3.3	3.3	3.3	0.8	0	3.3	3.2	2.7	3	0.1	3.3	2.9	3.3	3.3
Ref No.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.6	0	0	0.9	0.1	1.9	1.7	0	3.3	3.3	0	3.3	3.3	0	2.9	3.3	0	0	0	0
Ref No.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	1.2	3.3	0.9	2.3	0.1	1.9	0.1	0.2	1.8	3.3	0.8	0.8	1.8	1.8	1.7	1.7	1.7	1.7
Ref No.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	0	0.4	0	0.2	1.9	3.3	0.1	2.2	1.7	2.6	2.6	2.6	2.6	2.6	2.7	2.4	2.5	2.5	2.5
Ref No.	IC8001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.8	2	1.7	1.7	0.1	1.7	1.7	3.3	0.9	0.9	0.5	3.3	2.4	1	1	2.4	0.1	0.4	0.9	0.1
Ref No.	IC8001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	3.3	3.3	0.1	0.1	0	0.1	3.3	1.6	1.7	1.7	0.9	1.7	0	3.3	1.4	1.4	0	1.2	2.9	2.8
Ref No.	IC8001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
CD PLAY	2.6	2.9	2.6	2.8	0	3.1	2.9	3	2.9	3.2	3	3	0	3.3	3.1	2.9	2.9	2.8	2.6	2.6
Ref No.	IC8001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
CD PLAY	3.3	0	1.6	3.3	1.6	0	1.2	3.2	3.2	3.1	3.3	0	1.7	0	0	3.3	1.6	0	0	1.5
Ref No.	IC8001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
CD PLAY	0.1	1.6	0.2	0	3.3	1.6	0.2	1.6	1.4	0	1.2	2.2	2	2.5	3.3	3.3				
Ref No.	IC8051																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	2.9	3.3	3.1	3	0	3	3.2	3.3	3	2.9	0	2.8	3.3	2.6	3.3	3.2	3.2	3.1	1.8
Ref No.	IC8051																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.6	0	0.1	0.2	0.2	1.4	3.3	0	1.6	1.6	1.6	1.5	0.1	0	0	0	3.3	1.6	2.6	-
Ref No.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	2.9	3.3	3.1	3	0	2.9	3	3.2	2.6	2.7	0	2.8	0						
Ref No.	IC8111									IC8151										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5						
CD PLAY	3.3	-	0	1.9	3.9	-	-	4.1		2.3	2.3	0	1.2	0.8						
Ref No.	IC8251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	1.7	2.2	2.2	1.9	0	4.9	3.3	0	2.4	2.5	2.5	2.5	4.1	4.3	5	3.5	0	3.3
Ref No.	IC8251																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	9	8.8	1.8	1.7	1.7	1.7	3.3	4.3	0	0										
Ref No.	IC8421																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	3.1	2.7	3.1	1.5	0.8	1.5	1.7	4.9	0	0.9	0	0	0	2.4	2.4	4.9	0	2.4	2.4
Ref No.	IC8421																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	2.4	2.4	4.9	0	2.5	2.4	2.4	4.9												

Ref No.	IC8601					IC8606						IC8611								
MODE	1	2	3	4		1	2	3	4	5		1	2	3	4	5	6	7	8	
CD PLAY	3.2	1.2	0.1	0		3.3	3.3	0	0	-		0	0	0	0	3.2	3.3	0	3.3	
Ref No.	IC8651																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.2	1.1	1.7	1.4	1.2	1.7	1.6	1.9	1.1	0	3.3	3.3	3.3	3.3	0.7	1.6	0.7	1.5	1.9	1.9
Ref No.	IC8651																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.5	1.7	2	1.9	2.3	2	0	2.5	2.2	1.2	1	1.5	1.4	1.2	1.6	1.6	3.3	1.8	1.3	1.8
Ref No.	IC8651																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	1.8	1.5	1.6	2.1	1.8	0	3.3	0.8												
Ref No.	IC8701						IC8901						IC8902							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5			
CD PLAY	-	1.5	0	1.3	3.3		3.3	3.3	0	3.3	3.3		3.2	3.3	0	3.3	3.3			
Ref No.	IC9001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	2.2	1.9	2	1.6	1.5	1.8	1.8	1.3	0	2	1.4	1.9	1.9	1.6	1.7	2	1.9	2.3	3.3
Ref No.	IC9002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	1.8	1.6	0	0	1.4	1.5	1	1.2	0	2.1	1.1	1.2	1.6	1.4	1.2	1.6	1.6	1.9	3.3
Ref No.	IC9006																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	3.3	2.9	3.3	0.1	0.1	0.1	0.1	3.3	0.1	0	-	-	0	0	0	0	0	0	3.3
Ref No.	Q3211				Q3216				Q3221				Q3231				Q3235			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.4	0.1	0.7		1.4	0.1	0.8		1.1	0.1	0.5		1.4	0.1	0.7		1.1	0.1	0.4	
Ref No.	Q3239				Q3901				Q3902				Q3903				Q3941			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.7	0.1	0.1		0	3.3	-0.4		3.3	5	3.3		3.3	5	3.3		3.5	3.5	3.5	
Ref No.	Q3942				Q8321				Q8325				Q8331				Q8335			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	3.3	0		1.1	0	0.4		1.5	0	0.9		1.1	0	0.4		1.5	0	0.9	
Ref No.	Q8341				Q8551				Q8552				Q8561				Q8562			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.5	0	0.9		0	4.9	0.1		4.9	0	4.9		1.3	3.7	1.9		4.3	2.3	3.7	
Ref No.	QR3261				QR3271				QR8111								QR8420			
MODE	E	C	B		E	C	B		1	2	3	4	5	6		E	C	B		
CD PLAY	0.1	4.8	0		0.1	4.8	0		0	0	1.2	0.1	0.1	3.9		0	4.9	0.1		
Ref No.	QR8571																			
MODE	E	C	B																	
CD PLAY	3.3	3.3	0.1																	

SA-PTX7P DVD MODULE P.C.B.

17.2. Digital P.C.B.

Ref No.	IC1101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	3.2	1.8	0	0.6	1.0	1.8	3.2	3.2	1.3	0	1.1	2.2	2.2	0	0	0	0	0	3.2
STANDBY	0	3.2	1.8	0	0.6	1.0	1.8	3.2	3.2	1.3	0	1.7	2.2	2.2	0	0	0	0	0	3.2
Ref No.	IC1101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.1	1.1	2.3	2.3	1.6	2.7	0	3.2	1.8	2.6	1.1	1.	12.3	0	3.2	2.3	1.6	2.7	1.8	2.6
STANDBY	1.0	1.1	3.2	1.1	3.2	1.1	0	3.2	3.2	1.1	1.1	1.1	3.2	0	3.2	1.1	3.2	1.1	3.2	1.1
Ref No.	IC1101																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	3.2	1.0	1.0	2.3	2.3	0	3.2	1.5	2.7	0	2.6	1.0	0	3.2	1.0	2.3	0	1.5	0
STANDBY	0	3.2	1.0	1.0	3.2	1.0	0	3.2	3.2	1.0	3.2	1.0	1.0	0	3.2	1.0	3.2	1.0	3.2	0
Ref No.	IC1101																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.2	2.6	0	0	1.8	0	0	0	0	0	0	0	3.2	0	0	0	0	3.2	3.2	0
STANDBY	3.2	1.0	3.2	1.0	1.8	0	3.2	0	2.2	2.2	0	3.2	0	2.2	0	0	0	3.2	3.2	0
Ref No.	IC1101																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.2	1.8	1.8	1.3	3.2	0	1.3	0	3.2	0	3.2	3.2	2.8	3.2	3.2	0	3.2	2.5	2.5	2.6
STANDBY	0	0	0	0.6	3.2	0	1.3	0	3.2	0	3.2	3.2	2.9	3.2	3.2	0	3.2	2.2	2.2	2.2
Ref No.	IC1200																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.8	0	1.8	0	0.8	0	0	3.2	0.8	0	0.8	3.2	0	0	0	0	1.8	0	3.2	3.2
STANDBY	0	0	1.8	0	0.8	0	0	3.2	0.8	0	0.8	3.2	0	1.8	0	0	1.8	0	3.2	3.2
Ref No.	IC1200																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0.1	0.1	2.1	2.2	1.7	0	3.2	0.8	3.2	3.2	0.1	0	0	0	0	3.2	3.2
STANDBY	0	0	0	0.1	0.1	2	2.2	0	1.7	3.2	3.1	2.9	0	0	0	0	0	3.2	3.2	3.2
Ref No.	IC1200																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	2.6	0	0	0	0	0	0	2.2	1	0	0	0	0	0	1.6	2.2	1
STANDBY	3.2	1.8	0	0.3	0.1	0.3	0	0.2	3.2	0	0.2	0	0	0	0	0	0.3	0.1	0.2	0.2
Ref No.	IC1200																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1	1	1.8	3.2	3.2	1.8	0	4.5	0	1.1	1.1	1	0	1.1	1.1	1.1	1.1	1.8	0	3.2
STANDBY	0	0	1.8	3.2	3.2	1.8	0	4.5	0	1.1	1.1	1	0	1.1	1.1	1.1	1.1	1.8	0	3.2
Ref No.	IC1200																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	1.1	1	1.1	1.1	0	1.1	1.2	1.2	3.2	1.2	0	3.3	3.3	3.2	3.3	0	0	3.2	0	1.8
STANDBY	1.1	1	1.2	1.2	0	1.1	1.2	1.2	3.2	1.1	0	3.3	3.3	3.2	3.3	0	1.1	3.2	1.1	1.8
Ref No.	IC1200																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	3.2	0	3.3	3.32	3.2	3.2	0	1.8	0	1	0	3.2	0	0	0	3.2	1.8	0	0
STANDBY	0	3.23	1.1	3.3	3.3	3.2	3.2	0	1.8	0	0.8	0	3.2	0	0	0	3.2	1.8	0	0
Ref No.	IC1200									IC1201										
MODE	121	122	123	124	125	126	127	128		1	2	3	4	5						
CD PLAY	0.8	0	3.2	0	0	0	1.8	0		-	0	3.2	3.2	1.8						
STANDBY	0.8	0	3.2	0	0	0	1.8	1.6		-	0	3.2	3.2	1.8						
Ref No.	IC1300																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	2.6	3.2	1.7	2.6	0	0	2.3	3.2	2.2	1	0	0	3.2	2.8	3.2	3.1	3.1	2.8	3
STANDBY	3.2	1.0	3.2	3.2	1.0	0	3.2	1.0	3.2	3.2	1.0	0	1.0	3.2	2.9	3.2	3.1	3.1	2.8	3.2
Ref No.	IC1300																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3	3.2	0.1	0.1	0.1	2.1	3.2	0	2.1	1.7	1.7	1.5	1.5	0.1	0.1	0	3.2	1.6	2.8	0
STANDBY	3.1	3.1	0	0	0	2.2	3.2	0	2.2	1.7	1.7	1.5	1.5	0.1	0.1	0	3.2	1.6	2.9	0
Ref No.	IC1300																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	1.1	3.2	3.2	0.5	0	0.1	0.1	3.2	1	3.2	0	1	0						
STANDBY	0	1.0	3.2	3.2	1.0	0	3.2	1.0	3.2	3.2	1.0	0	1.0	0						
Ref No.	IC1301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	1	3.2	1.8	2.6	0	1.6	2.3	3.2	2.2	1.1	0	1.1	3.2	2.8	3.2	3.1	3.1	2.8	3
STANDBY	3.2	1.0	3.2	3.2	1.1	0	3.2	1.1	3.2	3.2	1.1	0	1.1	3.2	2.9	3.2	3.1	3.1	2.8	3.1
Ref No.	IC1301																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3	3.2	0.1	0.1	0.1	2.1	3.2	0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0	3.2	1.6	1.6	-
STANDBY	3.2	3.1	0	0	0	2.2	3.2	0	2.2	1.7	1.7	1.4	1.5	0.1	0.1	0	3.2	1.6	2.9	-
Ref No.	IC1301																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	1.2	3.2	1.7	2.6	0	1.6	2.3	3.2	2.2	1.1	0	1.1	0						
STANDBY	0	1.1	3.2	3.2	1.1	0	3.2	1.1	3.2	3.2	1.1	0	1.1	0						
Ref No.	IC1400																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	3.0	3.0	0.1	3.2	0.1	1.5	1.5	3.0	3.0	2.8	3.2	3.0	3.2	0.9	3.0	0	1.7	1.7	2.2
STANDBY	0	3.0	3.0	0.1	3.2	0.1	1.5	1.5	3.0	3.0	2.8	3.2	3.0	3.2	1.4	3.0	0	1.7	1.7	2.2
Ref No.	IC1400																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	2.2	0.1	0.1	0.1	0	3.2	0	3.2	2.6	2.6	1.8	1.7	2.7	2.7	1.5	1.5	3.2	2.3	2.3	2.3
STANDBY	2.2	0	0	0	0	3.2	0	3.1	1.0	1.0	3.2	3.2	1.0	1.0	3.2	3.2	3.2	1.0	1.0	3.2
Ref No.	IC1400																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	2.3	1.0	1.0	1.0	1.0	0	3.2	0												
STANDBY	3.2	1.0	1.0	1.0	1.0	0	3.2	0												
Ref No.	IC1504						IC1505						IC1506							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5			
CD PLAY	0	0	0	3.2	3.2		0	3.2	0	3.2	3.2		0	3.2	0	0	3.2			
STANDBY	0	0	0	3.2	3.2		0	3.2	0	3.2	3.2		0	3.2	0	0	3.2			

Ref No.	IC1507				IC1702															
MODE	1	2	3		1	2	3	4	5	6	7	8	9	10	11	12	13	14		
CD PLAY	3	0	1.5		0	0	0	3.2	0	0	0	0	0	0	3.2	3.2	0	3.2		
STANDBY	3	1.5	0		0	3.2	0	3.2	0	0	0	0	0	0	3.2	3.2	3.2	3.2		
Ref No.	IC1703																			
MODE	1	2	3	4	5	6														
CD PLAY	3.2	0	0	3.2	0	0														
STANDBY	3.2	0	0	3.2	3.2	0														
Ref No.	IC1704																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.8	3.2	3.2	3.2	3.2	3.2	0	3.2	2.8	3.2	0	0	0	3.2						
STANDBY	2.9	3.2	3.2	3.2	3.2	3.2	0	3.2	2.9	3.2	0	0	0	3.2						
Ref No.	IC1705																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	0	1.6	3.2	0	0	0	0	0	3.2	0	0	0	3.2						
STANDBY	3.2	0	1.6	3.2	0	3.2	0	0	3.2	3.2	0	0	3.2	3.2						
Ref No.	IC1706																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	3.2	1.6	3.2	3.2	0	0	0	0	3.2	1.6	0	3.2	3.2						
STANDBY	3.2	3.2	1.6	3.2	3.2	0	0	3.2	0	3.2	1.6	0	3.2	3.2						
Ref No.	IC1707																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	3.2	1.6	3.2	3.2	0	0	0	3.2	3.2	1.6	3.2	3.2	3.2						
STANDBY	3.2	3.2	1.6	3.2	3.2	0	0	0	3.2	3.2	1.6	3.2	3.2	3.2						
Ref No.	IC1708																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	3.2	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	3.2				
STANDBY	3.2	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	3.2				
Ref No.	IC1709																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	3.2	2.8	3.2	0	0	3.2	3.2	3.2												
STANDBY	3.2	2.9	3.2	0	2.0	3.2	3.2	3.2												
Ref No.	IC1710																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	2.8	3.2	0	0	0	0	0	0	0	0	0	0	0						
STANDBY	3.2	2.9	3.2	0	0	0	0	0	0	0	0	0	0	3.2						
Ref No.	IC1711																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	0	1.6	3.2	0	3.2	0	3.2	0	3.2	1.6	0	3.2	3.2						
STANDBY	3.2	0	1.6	3.2	0	3.2	0	3.2	0	3.2	1.6	0	3.2	3.2						
Ref No.	IC1712																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	3.2	0	3.2	3.2	0	3.2	0	3.2	0	3.2	3.2	0	3.2	3.2						
STANDBY	3.2	0	3.2	3.2	0	3.2	0	3.2	0	3.2	3.2	0	3.2	3.2						
Ref No.	IC1800																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.6	1.5	3.2	1.0	1.0	0	0	3.2	0	0	0.1	0	3.2	0	0	1.6	1.6	1.6	0	0
STANDBY	1.6	1.5	3.2	1.0	1.0	0	0	3.2	0	0	0	0	3.2	0	0	1.6	1.6	1.6	0	0
Ref No.	IC1800																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	3.2	3.2	3.2	0	0	3.2	3.2	3.2	3.2	3.2	3.2	0	3.2	3.2	-	0.9	0	0.9	0
STANDBY	0	3.2	3.2	3.2	0	0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0	3.2	-	1.4	0	1.4	0
Ref No.	IC1800																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	3.2	0	3.2	0	0	0	1.6	3.2	1.6	0	3.2	1.6	0	0	1.6	1.6	3.2	0	0	1.6
STANDBY	3.2	0	3.2	0	0	0	1.6	3.2	1.6	0	3.2	1.6	0	0	1.6	1.6	3.2	0	0	1.6
Ref No.	IC1800																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	0	0	3.2	0	0	3.2	3.2	0	3.2	0	0	0	1.0	0	0	0	0	1.6	1.6
STANDBY	0	0	0	3.2	0	0	3.2	3.2	0	3.2	0	0	0	1.0	0	0	0	0	1.6	1.6
Ref No.	IC1800																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.2	1.6	3.2	0	3.2	0	0	0.1	0	0	0	0	3.2	3.2	3.2	3.2	3.2	0	0	3.2
STANDBY	3.2	1.6	3.2	0	3.2	0	0	0	0	0	0	0	3.2	3.2	3.2	3.2	3.2	0	0	3.2
Ref No.	IC1800																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	1.6	3.2	1.0	1.2	0.8	1.0	1.0	1.0	0	3.2	1.7	2.2	0	0	3.2	1.0	0	2.2	1.1
STANDBY	0	1.6	3.2	1.0	1.0	1.0	0	1.7	0	0	3.2	3.2	0	0	0	3.2	0	0	0	3.3
Ref No.	IC1800																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.7	0	1.0	0	1.4	3.2	1.1	0	3.1	1.6	0.1	0	1.5	2.5	3.2	0	0	0.1	0	2.2
STANDBY	3.3	0	0	0	0	3.3	0	0	0	1.6	0	0	0	0	3.3	0	0	3.2	0	1.6
Ref No.	IC1800																			
MODE	141	142	143	144																
CD PLAY	2.2	3.0	0	3.0																
STANDBY	1.7	3.2	0	0																

Ref No.	IC1801						IC1900						IC1901							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	6	7	8
CD PLAY	0	0	3.2	3.2	1.6		3.2	3.2	0	3.2	3.2		1.6	1.6	1.6	0	1.6	0	0	3.2
STANDBY	0	0	3.2	3.2	1.6		3.2	3.2	0	3.2	3.2		1.6	1.6	1.5	0	1.6	0	0	3.2

Ref No.	IC1902																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0	3.2	0	0	1.6	3.2	3.2	3.2	0	0	5.0	0	2.3	2.3	2.5	0				
STANDBY	0	3.2	0	0	1.6	3.2	3.2	3.2	0	0	5.0	0	2.5	2.5	2.5	0				

Ref No.	IC1903																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.4	2.5	0	2.3	0	0	3.2	0	0	1.6	1.6	1.6	3.2	0	0	0				
STANDBY	2.5	2.5	0	2.5	0	5.0	3.2	0	1.5	1.6	1.6	1.6	3.2	0	0	0				

Ref No.	IC1904						IC1905													
MODE	1	2	3	4	5	6		1	2	3	4	5	6	7	8					
CD PLAY	1.5	0	1.5	1.6	3.2	1.6		1.6	1.6	0	0	0	0	0	0					
STANDBY	1.5	0	1.5	1.6	3.2	1.6		1.6	1.6	1.5	0	1.6	0	0	3.2					

Ref No.	IC1906						IC1907													
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8	9	10	11	12	13	14
CD PLAY	0	1.2	0	0.9	3.2		0	0.8	0.8	0	1.7	1.6	0	1.6	0	0	0	0.9	0	3.2
STANDBY	0	1.2	0	0.5	3.2		0	0	0.4	0	1.7	1.6	0	1.6	1.6	0	0	2.4	0	3.2

Ref No.	IC1918						IC1920													
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8						
CD PLAY	0	3.2	0	0	3.2		1.6	0	1.5	0	1.6	3.2	0	3.2						
STANDBY	0	3.2	0	0	3.2		1.6	1.6	1.5	0	1.6	3.2	0	3.2						

SA-PTX7P DIGITAL P.C.B.

17.3. Tray Loading, XM Module, Panel, & Tact-2 P.C.B.

Ref No.	IC904																			
MODE	1	2	3	4	5	6	7	8	9											
CD PLAY	5.1	7.5	0.6	7.5	0	7.5	0.6	2.8	5.1											
STANDBY	5.1	7.6	0.6	7.6	0	7.6	0.6	2.8	5.1											

SA-PTX7P TRAY LOADING P.C.B.

Ref No.	IC1																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	0	3.3	3.3	3.1	0	0.3	3.3	0	0	3.3	0	3.3	0	3.3	0	3.3	1.3	1.3	3.3
STANDBY	3.3	0	3.3	3.3	3.2	0	0.2	3.3	0	0	3.3	0	3.3	0	3.3	0	3.3	1.3	1.3	3.3

Ref No.	IC1																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	1.3	1.3	0	0	1.3	3.3	1.2	0.3	0	0	0	3.3	0	3.2	3.3	0	0	1.7	3.3
STANDBY	1.3	1.3	1.3	0	0	1.3	3.3	1.2	0.2	0	0	0	3.3	0	3.2	3.3	0	0	1.7	3.3

Ref No.	IC1																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	1.7	0	1.7	3.3	0.3	3.3	0.3	0												
STANDBY	1.7	0	1.7	3.3	0.2	3.3	0.2	0												

Ref No.	IC2																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	5.2	5.2	0	1.8	5.2	5.2	5.2												
STANDBY	0	5.2	5.2	0	1.7	5.2	5.2	5.2												

Ref No.	IC3																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	1.7	1.7	0	1.7	5	3.2	0	5.2	5.2	2.6	2.6	2.6	0	5.2	0.2	5.2				
STANDBY	1.7	1.7	0	1.7	5	3.2	0	5.2	5.2	2.6	2.6	2.6	0	5.2	0.1	5.2				

SA-PTX7P XM MODULE P.C.B.

Ref No.	IC800																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	1.9	1.1	0.1	0.1	3.3	1.1	1.1	0	3.3	-24.8	-24.8	-22.6	-22.6	-15.8	-22.6	-18
STANDBY	0	0	0	0	1.9	1.1	0.1	0.1	3.3	1.2	1.1	0	3.3	-24.6	-24.6	-24.6	-24.6	-15.7	-13.4	-17.9

Ref No.	IC800																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-24.8	-24.8	-24.8	-18	-18	-24.8	-24.8	-22.6	-24.8	-25.5	-15.9	-16	-23.2	-23	-23	-23	-23	-23	-23.1	-23.1
STANDBY	-24.6	-24.6	-22.3	-15.6	-15.6	-22.3	-24.6	-20.1	-11.2	-25	-18	-15.8	-23	-22.9	-22.9	-22.9	-22.9	-22.9	-22.9	-22.9

Ref No.	IC800																			
MODE	41	42	43	44																
CD PLAY	-23	-23	3.3	0																
STANDBY	-22.9	-22.8	3.3	0																

Ref No.	Q800																			
MODE	E	C	B																	
CD PLAY	0	0.1	2.8																	
STANDBY	0	0.1	2.8																	

SA-PTX7P PANEL P.C.B.

Ref No.	Q841																			
MODE	E	C	B																	
CD PLAY	0	4.5	0																	
STANDBY	0	4.7	0																	

SA-PTX7P TACT-2 P.C.B.

17.4. Main P.C.B.

Ref No.	IC501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	-	-0.1	2.7	3.2	2.9	3.3	0.8	3.1	3.1	3.1	3.1	3	0.2	0	3	0	3.3	1.8	3.3
STANDBY	0	-	0	2.7	3.2	2.9	0	1.3	3.3	3.3	3.3	3.3	3.3	0	0	3.3	0	3.3	1.8	3.3
Ref No.	IC501																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.6	3.3	3.3	3.2	3.3	0	3.2	0	3.3	3.3	3.3	0.8	3.3	0	0	0	0	3.3	3.3	3.3
STANDBY	0	3.3	3.3	3.3	3.3	0	3.2	0	3.3	3.3	3.3	1.3	3.3	0	0	0	0	3.3	3.3	3.3
Ref No.	IC501																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	3.3	3.3	3.3	0	3.3	3.3	0	0	3.3	3.3	0	3.3	3.2	0	0	0	3.2	3.2	3.3	0
STANDBY	3.3	3.3	0	3.3	3.3	3.3	0	0	3.3	3.3	0	3.3	3.2	0	0	0	3.3	3.3	3.3	0
Ref No.	IC501																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.8	3.3	0	3.3	0	3.3	1.3	1.7	3.3	1.8	3.3	1.6	1.6	0	0	1.8	3.3	3.3	3.2	3.2
STANDBY	1.8	3.3	0	3.3	0	3.3	1.3	1.7	3.3	1.8	3.3	1.6	1.6	0	3.3	1.8	3.3	3.2	3.2	3.2
Ref No.	IC501																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	0	3.3	3.3	3.3	0	3.3	0	3.2	3.3	3.3	0.2	0	0	3.2	3.2	3.2	0	3.3	0.1
STANDBY	0	0	0	0	0	0	3.3	0	3.2	3.3	3.3	0.2	0	0	3.2	3.4	3.3	0	3.3	0.1
Ref No.	IC501																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	3.3	0.1	3.3	0	0	3.3	3.2	0	3.3	1.1	3	3.3	3.2	3.3	0	3.2	3.3	3.3	3.1	2.6
STANDBY	3.3	0.1	3.3	0	0	3.3	3.3	0	3.3	1.3	0	3.2	3.2	3.3	0	3.3	3.3	3.3	3.2	2.6
Ref No.	IC501																			
MODE	121	122	123	124	125	126	127	128												
CD PLAY	3.3	0.7	3.3	0	0	1.8	3.3	3.3												
STANDBY	3.3	0.9	3.3	0	0	1.8	3.3	3.3												
Ref No.	IC502						IC503													
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8						
CD PLAY	0	0	0	3.3	3.3		0	0	0	0	3.3	3.3	0	3.3						
STANDBY	0	0	0	3.3	3.3		0	0	0	0	3.3	3.3	0	3.3						
Ref No.	IC504																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	0	0	6.8	0	0	0	0	0	0	-7	0	0	0						
STANDBY	0	0	0	6.9	0	0	0	0	0	0	-7	0	0	0						
Ref No.	IC505									IC506										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
CD PLAY	0	0	0	-7	0	0	0	6.8		0	0	0	-7	0	0	0	6.8			
STANDBY	0	0	0	-7	0	0	0	6.9		0	0	0	-7	0	0	0	6.9			
Ref No.	IC507									IC508										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
CD PLAY	0	0	0	0	0	0	0	6.8		0	0	0	-7	0	0	0	6.8			
STANDBY	0	0	0	-7	0	0	0	6.9		0	0	0	-7	0	0	0	6.9			
Ref No.	IC509																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	-7	0	0	0	6.8												
STANDBY	0	0	0	-7	0	0	0	6.9												
Ref No.	IC510																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ref No.	IC510																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
CD PLAY	-	-	-	-	0	0	6.8	0	-7	0	0	0								
STANDBY	-	-	-	-	0	0	6.9	0	-7	0	0	0								
Ref No.	IC511																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0	0	0	1.2	1.2	0.7	0.7	0	0.7	0.7	0.7	0.7	0	3.2	3.2	3.2				
STANDBY	0	0	0	0.8	0.8	0.7	0.7	0	0.7	0.7	0.7	0.7	0	3.3	3.3	3.3				
Ref No.	IC514																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	4.8	2.3	2.4	1.8	2.5	1.9	0	2.3	2.2	0	2.2	2.2	2	2	1.9	2.2				
STANDBY	4.9	2.3	2.5	1.7	2.6	1.7	0	2.3	2.3	0	2.3	2.3	1.7	1.7	1.7	2.3				
Ref No.	IC518									IC519										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
CD PLAY	-5.5	0.9	-0.1	-7	-0.1	-0.1	-0.1	5		-0.1	5.3	5.3	-0.1	3.2	5.3	5.3	5.3			
STANDBY	-5.5	0.9	0	-7	0	0	0	5		0	5.4	5.4	0.1	3.3	5.4	5.4	5.4			
Ref No.	IC520																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	-0.1	5.2	5.2	3.2	3.2	4.4	4.4	4.4												
STANDBY	0	5.3	5.3	3.3	3.3	5.2	5.2	5.2												

Ref No.	Q500				Q501				Q502				Q503							
MODE	E	C	B		E	C	B		E	C	B		1	2	3	4	5	6		
CD PLAY	3.3	-3.9	3.2		0	0	0.6		0	3.3	0		-0.1	-7	-0.1	-0.1	-6.9	-0.1		
STANDBY	2.2	2.2	1.5		0	0	0.6		0	3.3	0		0	-7	0	0	-7	0		
Ref No.	Q504								Q505						Q506					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B			
CD PLAY	0	-3.9	0	0	-3.9	0		0	-3.9	0	0	-3.9	0		-0.1	11.9	-0.1			
STANDBY	0	0.4	0	0	0.7	0		0	0.7	0	0	0.7	0		0	11.6	0			
Ref No.	Q512				Q513				Q514				Q515				Q516			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.6		0	0	0.6		0	0	0.6		0.6	0	0		0	0	0.6	
STANDBY	0	0	0.6		0	0	0.6		0	0	3.1		0	0	0.6		0	0	0.6	
Ref No.	Q517				Q520								Q521				Q522			
MODE	E	C	B		1	2	3	4	5	6		E	C	B		E	C	B		
CD PLAY	0	0	0.6		0	-7.1	0	0	-7.1	0		3.2	3.2	2.5		0	0	0		
STANDBY	0	0	0.6		0	-7.1	0	0	-7.1	0		3.2	3.2	2.5		0	0	0		
Ref No.	Q550				Q560				Q561				Q562							
MODE	E	C	B		E	C	B		E	C	B		1	2	3	4	5	6		
CD PLAY	-0.1	3.1	-0.1		3.2	-0.1	2.8		3.2	-3.9	3.2		-0.1	-3.8	-0.1	-0.1	-3.9	-0.1		
STANDBY	0	3.2	0		3.3	0	2.9		3.3	-3.9	3.2		0	-3.9	0	0	-3.9	0		
Ref No.	Q563				Q566								Q567							
MODE	E	C	B		1	2	3	4	5	6		1	2	3	4	5	6			
CD PLAY	3.3	-3.9	3.2		5	5	0.5	5	5	5		4.9	4.9	0.5	5	4.9	4.9			
STANDBY	2.2	2.2	1.5		5	5	0.5	5	5	5		5	5	0.5	5	5	5			
Ref No.	Q568							Q569												
MODE	1	2	3	4	5	6		1	2	3	4	5	6							
CD PLAY	9	9	0.8	9	9	9		2.4	2.4	0.2	2.5	2.4	2.4							
STANDBY	9	9	0.8	9	9	9		2.4	2.4	0.2	2.4	2.4	2.4							
Ref No.	QR501							QR502							QR503					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B			
CD PLAY	-0.1	-0.1	0	-0.1	4	4		-0.1	-0.1	0	-0.1	4	4		-0.1	4.9	-0.1			
STANDBY	0	0	0	0	4.1	4.1		0	0	0	0	4.1	4.1		0	0	3.2			
Ref No.	QR504				QR506				QR507				QR512				QR513			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	3.3	-7.1	3.3		3.3	-7.1	3.3		0	0	3.1		0	0	3.1		0	0	3.1	
STANDBY	3.3	-7.1	3.3		3.3	-7.1	3.3		0	0	3.1		0	0	3.1		0	0	3.1	
Ref No.	QR514				QR515				QR516											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	0	3.1		0	0	3.1		0	0	3.1									
STANDBY	0	0	0.6		0	0	3.1		0	0	3.1									

SA-PTX7P MAIN P.C.B.

17.5. AC-Inlet, Power & Regulator P.C.B.

Ref No.	IC701									IC702				IC703						
MODE	1	2	3	4	5	6	7	8		1	2	3		1	2	3				
CD PLAY	5.9	0.9	2.4	14.2	159	-	0	0		4.2	2.5	0		4.5	0	3.3				
STANDBY	6	1	2.4	14.2	159.3	-	0	0		4.2	2.5	0		4.5	0	3.3				
Ref No.	Q701																			
MODE	E	C	B																	
CD PLAY	0	0.1	0.8																	
STANDBY	0	0.1	0.8																	

SA-PTX7P AC-INLET P.C.B.

Ref No.	IC722						IC723						IC725						
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	6	7
CD PLAY	10.9	10.9	9	-	0		11.6	11.6	9	-	0		18.6	-	-11.3	-8.1	-11.3	-11	-11.1
STANDBY	10.9	10.9	9	-	0		11.6	11.6	9	-	0		18.8	-	-11.4	-8	-11.3	-11	-11.2
Ref No.	IC726						IC727												
MODE	1	2	3	4	5		1	2	3										
CD PLAY	5.2	5.2	0	-	-		25.4	2.5	0										
STANDBY	5.2	5.2	0	-	-		25.3	2.5	0										
Ref No.	Q721				Q722				Q723				Q724				Q725		
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	6.9	17.2	7.5		-7	-11.6	-7.7		0	-7.7	-0.6		-11.6	-11.3	-11.6		0	3.3	-2
STANDBY	6.9	17.2	7.5		-7	-11.6	-7.7		0	-7.7	-0.6		-11.6	-11.3	-11.5		0	3.3	-2
Ref No.	Q727				Q728				Q729										
MODE	E	C	B		E	C	B		1	2	3	4	5	6					
CD PLAY	0	11.3	0		0	0	0.6		11.6	11.6	2	11.6	11.6	11.6					
STANDBY	0	11.3	0		0	0	0.6		11.6	11.6	2	11.6	11.6	11.6					
Ref No.	QR730				QR732				QR733				QR734				QR735		
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	0	3.3	0		0	3.3	0		0	0	3.2		0	3.3	0		0	0	0.1
STANDBY	0	3.3	0		0	3.3	0		0	0	3.2		0	3.3	0		0	0	0.1

SA-PTX7P POWER P.C.B.

Ref No.	IC704									IC705										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
CD PLAY	1	2.3	1	1	0	6.1	17.3	1.6		1	2.2	1	0.8	0	14.1	17.3	1.6			
STANDBY	1	2.3	1	1	0	6.1	17.3	1.6		1	2.2	0.8	0.8	0	14.1	17.3	1.6			
Ref No.	IC706																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	1	2.3	1	0.8	0	12.4	17.3	1.6												
STANDBY	1	2.3	1	0.8	0	12.4	17.3	1.6												
Ref No.	Q702							Q703							Q704					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	6
CD PLAY	11.7	11.7	6	17.2	11.7	11.7		3.8	3.8	13.6	17.2	3.9	3.8		5.1	5.1	12.3	17.2	5.1	5.1
STANDBY	11.7	11.7	6	17.3	11.7	11.7		3.9	3.9	13.6	17.3	3.9	3.9		5.1	5.1	12.4	17.3	5.1	5.1
Ref No.	QR721				QR722				QR725				QR726				QR727			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	3		0	2.6	0		0	2.5	0		0	0	3		0	2.5	0	
STANDBY	0	0	3		0	2.6	0		0	2.5	0		0	0	3		0	2.5	0	

SA-PTX7P REGULATOR P.C.B.

17.6. Audio (D-Amp) P.C.B.

Ref No.	IC102																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
STANDBY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
Ref No.	IC102																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
STANDBY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
Ref No.	IC102																			
MODE	41	42	43	44																
CD PLAY	30	0	14.5	-																
STANDBY	30	0	14.5	-																
Ref No.	IC103																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
STANDBY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
Ref No.	IC103																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
STANDBY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
Ref No.	IC103																			
MODE	41	42	43	44																
CD PLAY	30	0	14.5	-																
STANDBY	30	0	14.5	-																
Ref No.	IC104																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
STANDBY	12	-	0	0	3.4	0	3.3	0	-	0	0	3.3	0	3.3	0	-	3.3	0	0	0
Ref No.	IC104																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
STANDBY	-	12	12	14.5	0	30	30	14.5	0	0	14.5	30	14.5	14.5	30	14.5	0	0	14.5	30
Ref No.	IC104																			
MODE	41	42	43	44																
CD PLAY	30	0	14.5	-																
STANDBY	30	0	14.5	-																
Ref No.	IC105																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.8	3.3	0	0	0.8	0	0	1.6	3.3	3.3	3.3	0	0	1.1	1.9	3.3	0.8	0.8	1.6	1.6
STANDBY	1.8	3.3	0	0	0.8	0.9	0	1.6	3.3	3.3	3.3	0	0	1.1	1.9	0	3.3	3.3	3.2	1.6
Ref No.	IC105																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
CD PLAY	0	0	0	0	0	0	3.2	0	0	1.9	0	0	0	0	0	0	0	0		
STANDBY	0	0	0	0	0	0	3.2	0	0	1.9	0	0	0	0	0	0	0	0		
Ref No.	IC106						IC107				IC108									
MODE	1	2	3	4	5		1	2	3		1	2	3	4	5					
CD PLAY	3.3	3.3	0	3.3	3.3		12.4	2.5	0		3.3	3.3	0	0	0					
STANDBY	3.3	3.3	0	3.3	3.3		12.4	2.5	0		3.3	3.3	0	0	0					
Ref No.	IC151							IC152												
MODE	1	2	3	4	5	6		1	2	3	4	5	6							
CD PLAY	0	0	0	0	3.3	0		0	0	0	0	3.3	0							
STANDBY	0	0	0	0	3.3	0		0	0	0	0	3.3	0							
Ref No.	Q101				Q102			Q103				Q104				Q105				
MODE	E	C	B		E	C	B	E	C	B		E	C	B		E	C	B		
CD PLAY	14.4	-	14.4		14.4	-	14.4	14.4	-	14.4		14.4	-	14.4		14.4	-	14.4		
STANDBY	0.6	-	0.6		14.4	-	14.4	14.4	-	14.4		14.4	-	14.4		14.4	-	14.4		
Ref No.	Q106				Q107			Q108				Q109				Q110				
MODE	E	C	B		E	C	B	E	C	B		E	C	B		E	C	B		
CD PLAY	14.4	-	14.4		30	0	0	0	3.3	0		0	3.8	0		0	0	0.7		
STANDBY	14.4	-	14.4		30	0	0	0	3.3	0		0	3.8	0		0	0.7	0		
Ref No.	Q111				Q112			Q113				Q114				Q115				
MODE	E	C	B		E	C	B	E	C	B		E	C	B		E	C	B		
CD PLAY	6.9	29	7.5		0	3.4	0	11.8	27.4	12.4		0	0	0.6		10.6	10.6	10		
STANDBY	7	29	7.5		0	3.4	0	11.8	27.4	12.4		0	0	0.6		10.6	10	10		

SA-PTX7P AUDIO(D-AMP) P.C.B.

17.7. Audio (DSP) P.C.B.

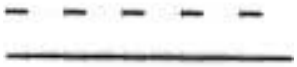
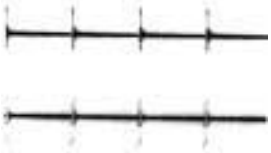
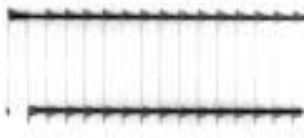
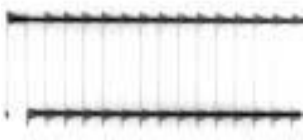
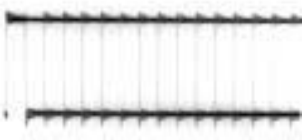
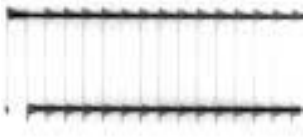
Ref No.	IC300																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	0	5	3.3	0	1.7	1.6	1.6	1	0	0	0	2.5	2.5						
STANDBY	2.5	0	5	3.3	0	1.7	1.6	0	1.2	0	0	0	2.5	2.5						
Ref No.	IC301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	0	4.9	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.5	2.5						
STANDBY	2.5	0	5	3.3	0	1.7	1.6	1.6	1.2	0	0	0	2.5	2.5						
Ref No.	IC302																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	0	4.9	3.3	0	1.7	1.6	1.6	1.3	0	0	0	2.5	2.5						
STANDBY	2.5	0	5	3.3	0	1.7	1.6	1.6	1.2	0	0	0	2.5	2.5						
Ref No.	IC303																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	0	4.9	3.3	0	1.7	1.6	1.6	1.2	0	0	0	2.5	2.5						
STANDBY	2.5	0	4.9	3.3	0	1.7	1.6	1.6	1.2	0	0	0	2.5	2.5						
Ref No.	IC305																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0	0	0	0	-	3.3	3.3	3.3	3.3	1.3	1.6	0	0	0	0
STANDBY	0	0	0	0	0	0	0	3.4	0	-	3.4	3.3	3.4	3.3	0.7	0	0	3.4	3.4	0
Ref No.	IC305																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	3.3	3.3	0	3.3	0	3.3	0	3.3	0	0	0	0	3.3	0	0	0
STANDBY	0	0	0	0	3.4	3.4	0	3.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.4	1.5	1.5	1.5
Ref No.	IC305																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	0	0	0	0	0	0	3.3	0												
STANDBY	1.5	1.5	1.5	1.6	1.5	0	3.4	0												
Ref No.	IC306																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	1.6	0.9	0.9	1.7	0	1.7	1.2	0.8	3.3	1.7	0.8	0	3.3	0	1.2	0	0	3.3	1.2
STANDBY	0	0.2	0.7	0.7	0.7	0	0.8	1.2	0	3.4	0.7	0	0	3.3	0	1.2	0	0	3.4	1.2
Ref No.	IC306																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0.6	0.5	1.2	0	3.3	3.3	0	0	3.3	3.4	1.2	3.4	3.4	0	3.4	3.4	3.4	0
STANDBY	0	0	0.6	0.6	1.2	0	3.4	3.4	0	0	3.4	3.4	1.2	3.4	3.4	0	3.4	3.4	3.4	0
Ref No.	IC306																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	3.4	0	1.2	0	0	0	0	0	3.4	0	0	1.2	0	0	0	1.2	0	0	3.4
STANDBY	0	3.4	0	1.2	0	0	0	0	0	3.4	0	0	1.2	0	0	0	1.2	0	0	3.4
Ref No.	IC306																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	0	0	0	1.2	0	3.4	3.4	0	0	3.4	0	3.4	0	0	0	1.2	0	3.4	3.4
STANDBY	0	0	0	0	1.2	0	3.4	3.4	0	1.7	3.4	0	3.4	3.4	3.4	3.4	1.2	0	3.4	3.4
Ref No.	IC306																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.4	0	3.4	3.4	1.2	3.4	0	3.4	3.4	1.2	3.4	3.4	0	3.4	0	3.4	0	3.4	0	3.4
STANDBY	3.4	0	3.4	3.4	1.2	3.4	0	3.4	3.4	1.2	3.4	3.4	3.4	3.4	0	3.4	0	3.4	0	3.4
Ref No.	IC306																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	1.2	3.4	3.4	3.4	0	0	0	0	0	3.4	0	3.4	0	0	0	0	0	0	0	0
STANDBY	1.2	0	3.4	3.4	3.3	0	0	0	0	3.4	0	3.4	0	0	0	0	0	0	0	0
Ref No.	IC306																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	0	0	1.2	0	3.4	0	0	1.2	0	0	0	1.2	0	0	0	3.4	0	0	0	0
STANDBY	0	0	1.2	0	3.4	0.8	0	0	0	0	0	0	0	0	0	3.4	0	0	0	0
Ref No.	IC306																			
MODE	141	142	143	144																
CD PLAY	0	3.4	3.4	0																
STANDBY	0	0.2	0.8	0																

Ref No.	IC308																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	2.7	0.3	0	0.3	0.3	3.3	0.3	0.3	0	0.3	0.3	3.3	2.9	3.3	3.3	3.3	0	3.3	0
STANDBY	3.4	1.3	1.3	0	1.3	1.3	3.4	1.3	1.3	0	1.3	1.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0
Ref No.	IC308																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	3.3	0	0	0	0	0	0	0	-	3.3	1.7	3.3	-	3.3	3.3	3.3
STANDBY	0	0	0	0	3.4	0	0	3.4	3.4	3.4	0	0	-	0	0	3.4	-	3.4	1.3	1.4
Ref No.	IC308																			
MODE	41	42	43	44	45	46	47	48	49	50										
CD PLAY	0	0	0	3.3	0	0	0	0	0	0										
STANDBY	0	1.3	1.4	3.4	1.4	1.4	0	1.4	1.4	0										
Ref No.	IC310																			
MODE	1	2	3	4	5															
CD PLAY	3.3	0	0	0	3.3															
STANDBY	3.3	0	0	0	3.3															
Ref No.	IC311																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	4.8	3.3	0.1	0.1	1.6	0	1.6	1.6	-	-	4.8	0	2.4	2.3	2.3	4.8				
STANDBY	4.8	3.3	0.1	0.1	1.6	0	1.6	1.6	-	-	4.8	0	2.4	2.3	2.3	4.8				
Ref No.	IC312						IC405													
MODE	1	2	3	4	5		1	2	3	4	5	6	7	8						
CD PLAY	-	3.3	0	0	3.3		5	4.5	1.2	1.2	0.8	0	4	5						
STANDBY	-	3.3	0	0	3.3		5	4.5	1.2	1.2	0.8	0	4	5						
Ref No.	Q300				Q305				Q405											
MODE	E	C	B		E	C	B		1	2	3	4	5	6						
CD PLAY	3.3	3.3	2.7		0	0.6	0		1.3	1.3	3.5	5	1.3	1.3						
STANDBY	3.3	3.3	2.7		0	0.6	0		1.3	1.3	4	5	1.3	1.3						
Ref No.	QR305																			
MODE	E	C	B																	
CD PLAY	0	3.3	0.2																	
STANDBY	0	3.3	0.2																	

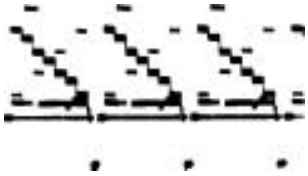
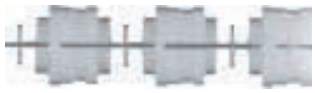
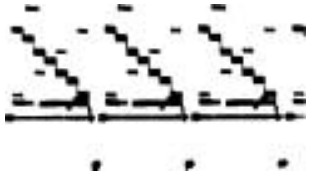
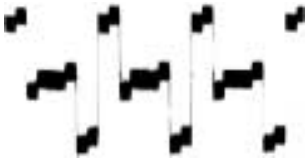
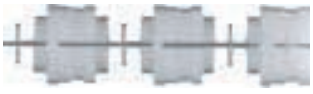
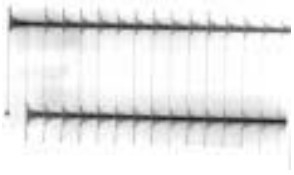
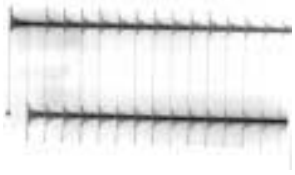
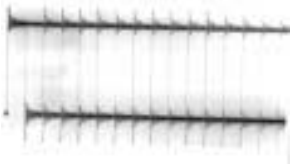
SA-PTX7P AUDIO(DSP) P.C.B.

17.8. Waveform Chart

17.8.1. Waveform 1

WF No. IC102-28,31,36,39 (PLAY) 29Vp-p(200usec/div)	WF No. IC103-28,31,36,39 (PLAY) 22Vp-p(200usec/div)	WF No. IC104-28,31,36,39 (PLAY) 26Vp-p(5msec/div)	WF No. IC105-24,25,26 (PLAY)  5.6Vp-p(10usec/div)
WF No. IC105-34,36,37,38 (PLAY)  5.8Vp-p(1usec/div)	WF No. IC300-9 (PLAY)  4Vp-p(500nsec/div)	WF No. IC300-13 (PLAY) 0.3Vp-p(200usec/div)	WF No. IC300-14 (PLAY) 2.1Vp-p(200usec/div)
WF No. IC301-9 (PLAY)  4Vp-p(500nsec/div)	WF No. IC301-13,14 (PLAY) 2.2Vp-p(200usec/div)	WF No. IC302-9 (PLAY)  4Vp-p(500nsec/div)	WF No. IC302-13,14 (PLAY) 2.2Vp-p(200usec/div)
WF No. IC303-9 (PLAY)  4Vp-p(500nsec/div)	WF No. IC303-13,14 (PLAY) 2.2Vp-p(200usec/div)	WF No. IC505-1 (PLAY) 0.4Vp-p(200usec/div)	WF No. IC505-7 (PLAY) 2.5Vp-p(200usec/div)
WF No. IC506-1,7 (PLAY) 2.3Vp-p(200usec/div)	WF No. IC507-1,7 (PLAY) 2.3Vp-p(200usec/div)	WF No. IC508-1,7 (PLAY) 2.3Vp-p(200usec/div)	WF No. IC509-1,7 (PLAY) 12Vp-p(200usec/div)
WF No. IC510-15,20,26 (PLAY) 0.4Vp-p(200usec/div)	WF No. IC510-16,19,25 (PLAY) 2.4Vp-p(200usec/div)	WF No. IC514-9 (PLAY) 0.7Vp-p(20usec/div)	WF No. IC514-11 (PLAY) 1.3Vp-p(20usec/div)

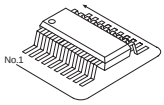
17.8.2. Waveform 2

WF No. IC514-12 (PLAY) 1.3Vp-p(20usec/div)	WF No. IC514-13 (PLAY) 2.2Vp-p(20usec/div)	WF No. IC514-15 (PLAY) 2.1Vp-p(20usec/div)	WF No. IC701-2,3,5 (PLAY) 160Vp-p(5msec/div)
WF No. IC702-1,2,3 (PLAY) 180Vp-p(5msec/div)	WF No. IC725-1,3,4,5,6,7 (PLAY) 180Vp-p(5msec/div)	WF No. IC800-5 (PLAY) 1.5Vp-p(2usec/div)	WF No. IC3201-37 (PLAY) 0.7Vp-p(20usec/div)
WF No. IC3201-38 (PLAY) 0.7Vp-p(20usec/div)	WF No. IC3201-39 (PLAY)  1.1Vp-p(20usec/div)	WF No. IC3201-42 (PLAY)  0.6Vp-p(20usec/div)	WF No. IC3201-43,44 (PLAY)  1.1Vp-p(20usec/div)
WF No. IC3251-4 (PLAY) 0.9Vp-p(20usec/div)	WF No. IC3251-14 (PLAY)  0.7Vp-p(20usec/div)	WF No. IC3251-15 (PLAY) 1.1Vp-p(20usec/div)	WF No. IC3252-4 (PLAY) 1.1Vp-p(20usec/div)
WF No. IC3252-14 (PLAY)  0.6Vp-p(20usec/div)	WF No. IC3901-14,16,18,20, 22, 24,36,37,90 (PLAY) 0.2Vp-p(5usec/div)	WF No. IC3901-35 (PLAY)  4.8Vp-p(500nsec/div)	WF No. IC3901-38 (PLAY)  4Vp-p(500nsec/div)
WF No. IC3901-43 (PLAY)  3.6Vp-p(500nsec/div)	WF No. IC3901-45 (PLAY) 3.6Vp-p(100nsec/div)	WF No. IC3901-87,88,89 (PLAY) 7.2Vp-p(5usec/div)	WF No. IC3901-92,93,94 (PLAY) 7.2Vp-p(5usec/div)

17.8.3. Waveform 3

WF No. IC3901-95 (PLAY) 0.6Vp-p(10usec/div)	WF No. IC8421-15 (PLAY) 2.4Vp-p(5msec/div)	WF No. IC8421-16,19,20,21, 22 (PLAY) 4Vp-p(200usec/div)	WF No. IC8421-26 (PLAY) 5Vp-p(200usec/div)
WF No. IC8421-27 (PLAY) 0.6Vp-p(200usec/div)			

18 Illustration of IC's, Transistors and Diodes



C0ABBB000403 (8p)
C0ABCB000038 (14p)
C0DBAKG00007 (8p)
C0DBAZZ00093 (8p)
C0DBZYE00002 (8p)
C0DBZYY00018 (8p)
C0EBA0000029 (4p)
C0FBAK000026 (16p)
C0FBAY000032 (14p)
C0FBBK000049 (16p)
C0FBBK000050 (28p)
C0FBBY000027 (16p)
C0GBA0000002 (20p)
C0JBAA000495 (14p)
C0JBAB000837 (6p)
C0JBAE000309 (8p)
C0JBAE000438 (14p)
C0JBAF000707 (14p)
C0JBAK000277 (16p)
C0JBAR000434 (8p)
C0JBAZ000851 (14p)
C0JBAZ001251 (20p)
C0ZBZ0001508 (16p)
C1AB00002460 (44p)
C1AB00002461 (38p)
C1AB00002750 (32p)
C3ABPG000145 (54p)
C3ABMG000228 (50p)
C3ABQG000105 (54p)
C9ZB00000498 (16p)
RFKWENJ007PA(8P)

C3FBND000289
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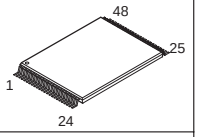

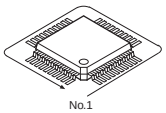

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C1AB00002670 (48p)
C1CB00002054 (100p)
C1DB00001549 (128p)
C2HBZY000024 (144p)
RFKWERE006PA (128p)
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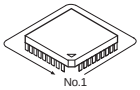
MN677382FV (144p)
MN864702 (128p)

C2GBC0000300 (256p)
C1ZBZ0003207 (256p)



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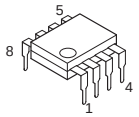

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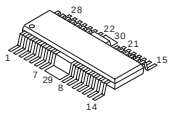

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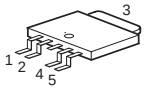

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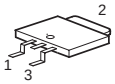

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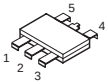

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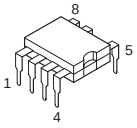

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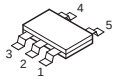

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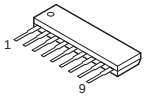

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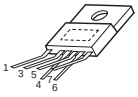

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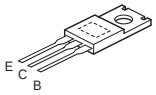

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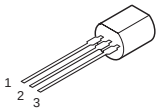

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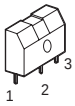

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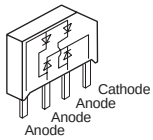

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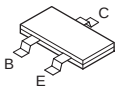

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B1GBCFJJ0047
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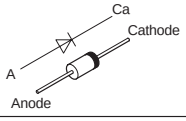

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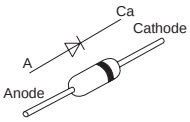

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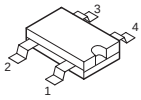

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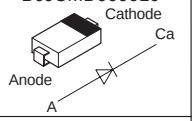

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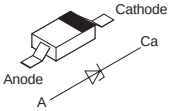

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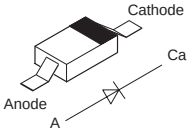

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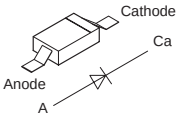

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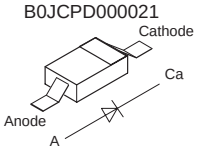

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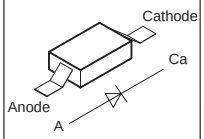

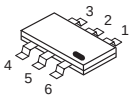

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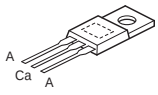

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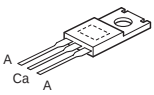

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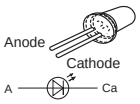

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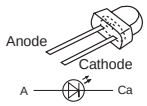

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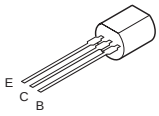

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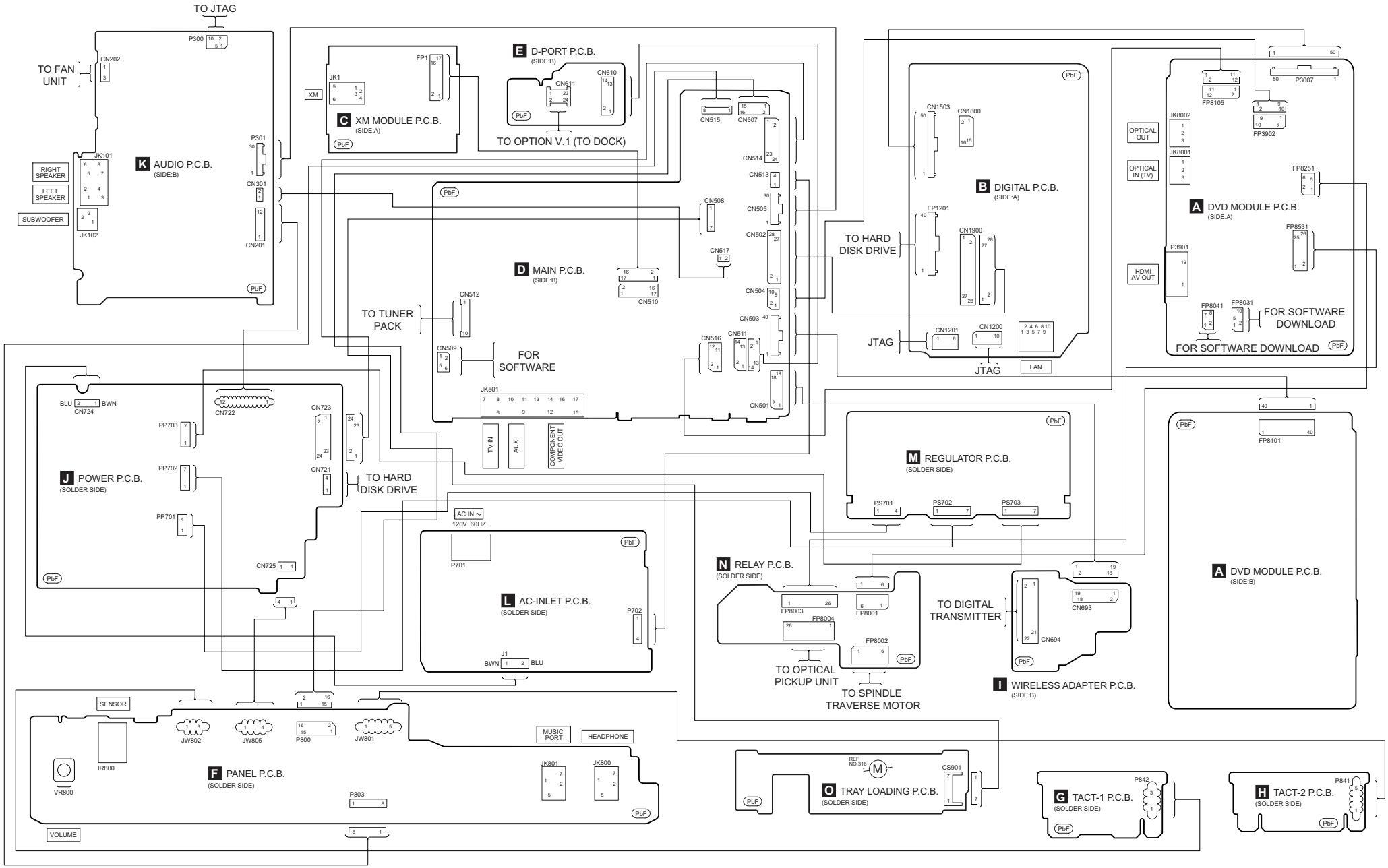
2SB1218ARL
2SD0601AHL

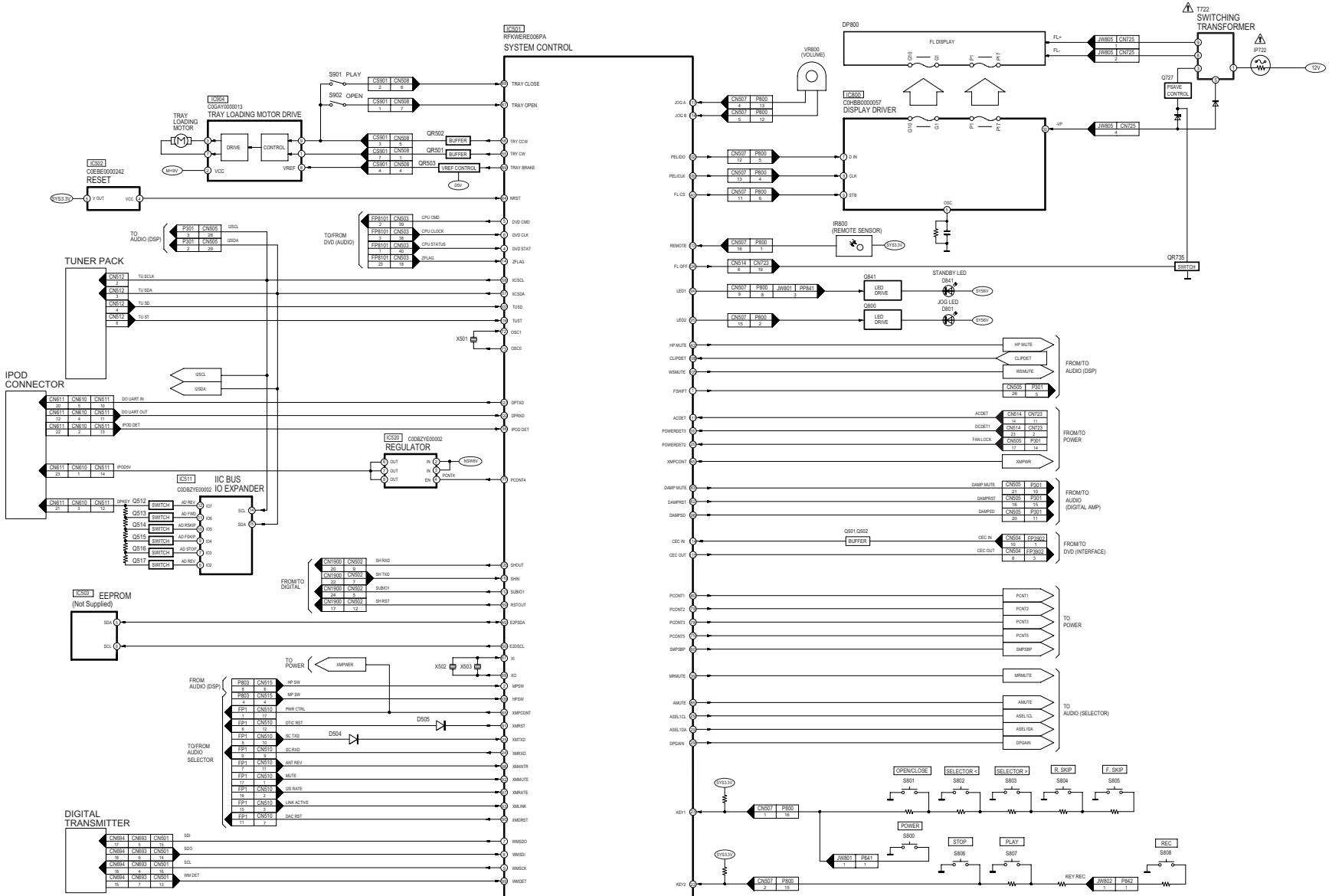
19 Wiring Connection Diagram



SA-PTX7P WIRING CONNECTION

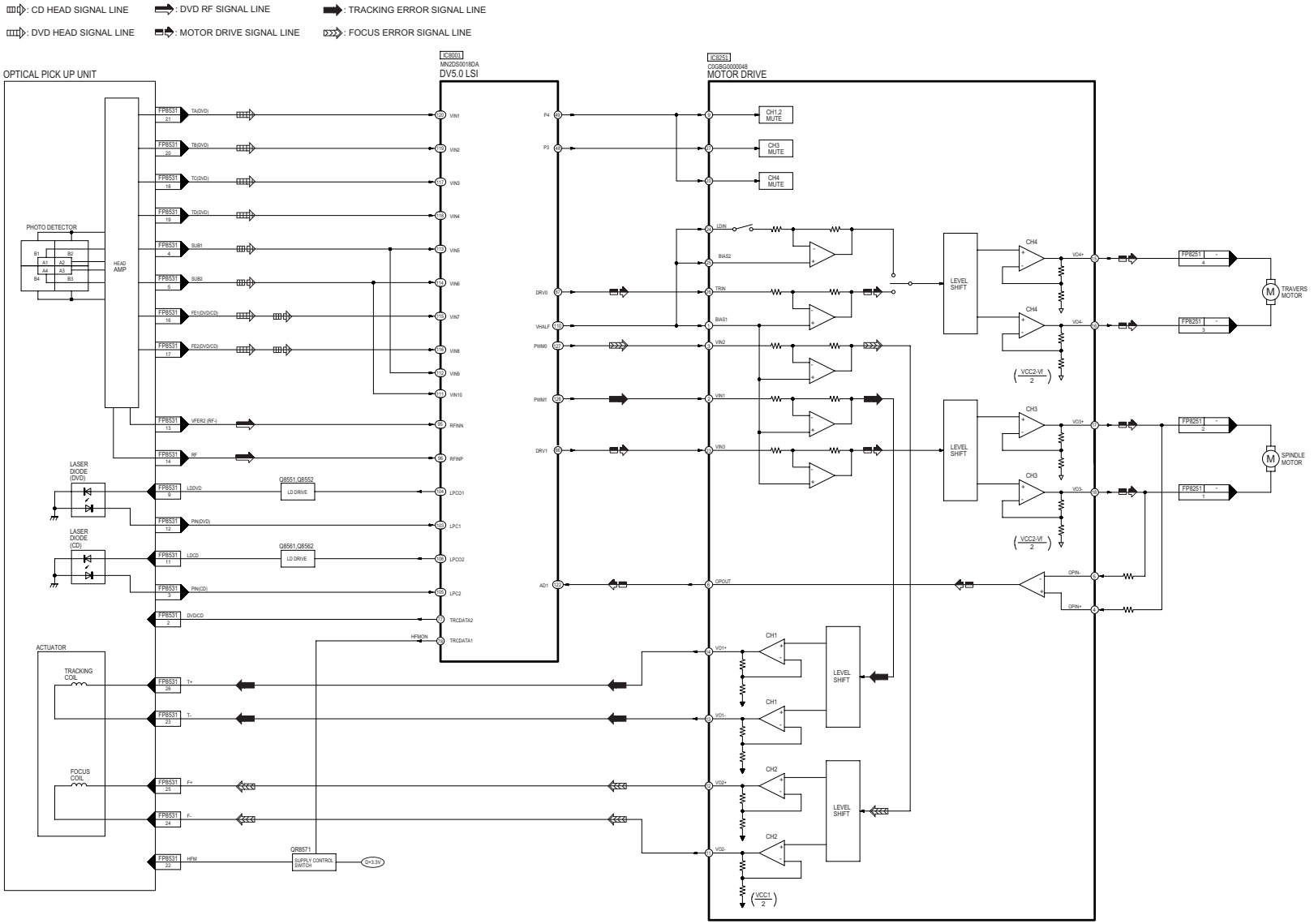
20 Block Diagram

20.1. System Control



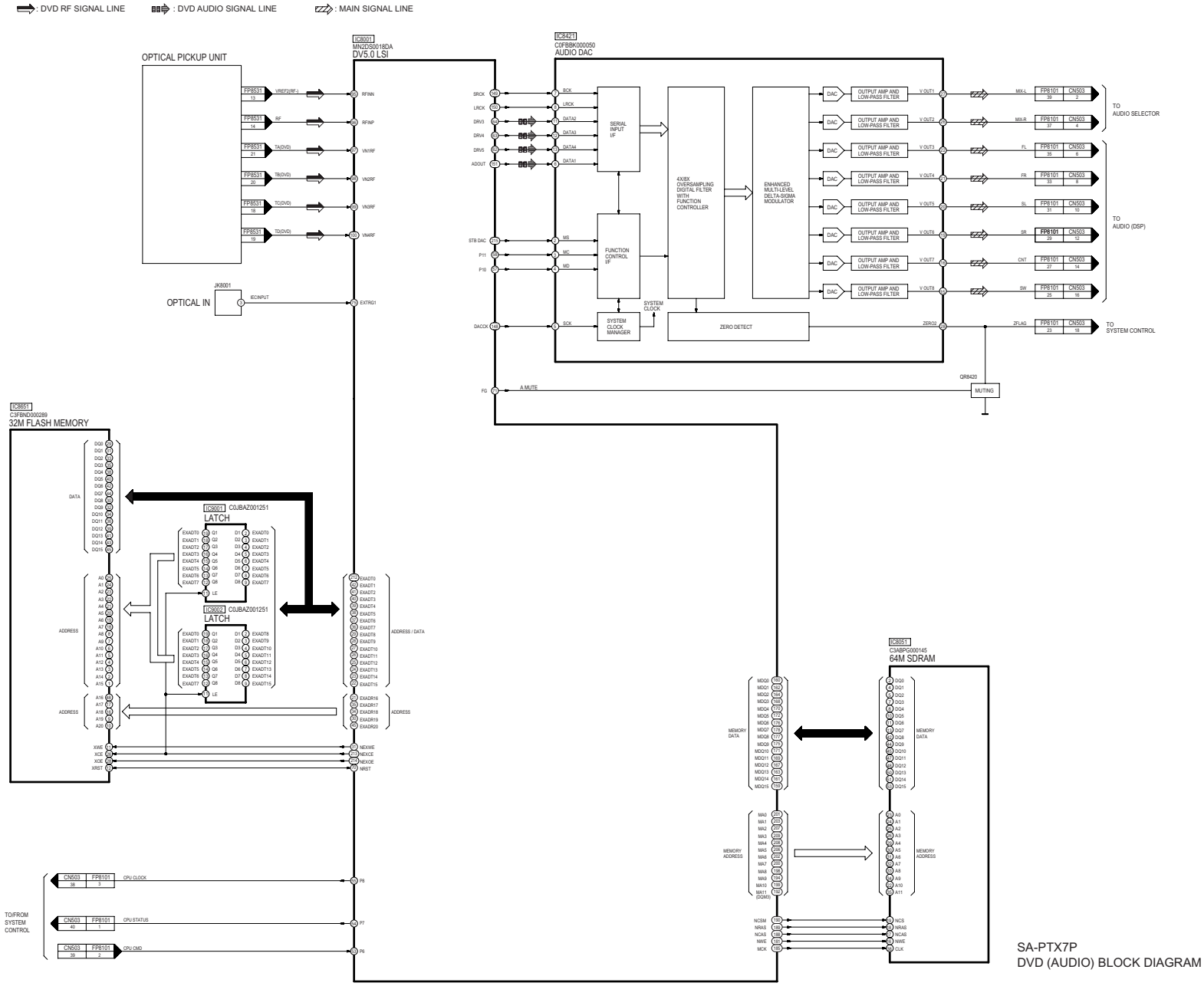
SA-PTX7P SYSTEM CONTROL BLOCK DIAGRAM

20.2. DVD (Servo)



SA-PTX7P DVD (SERVO) BLOCK DIAGRAM

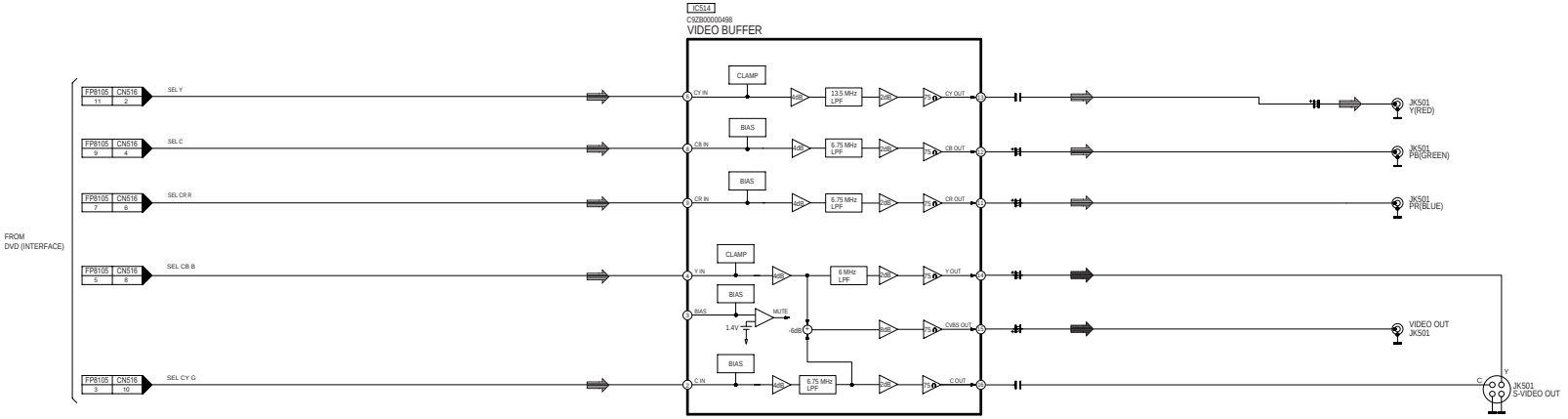
20.3. DVD (Audio)



SA-PTX7P
DVD (AUDIO) BLOCK DIAGRAM

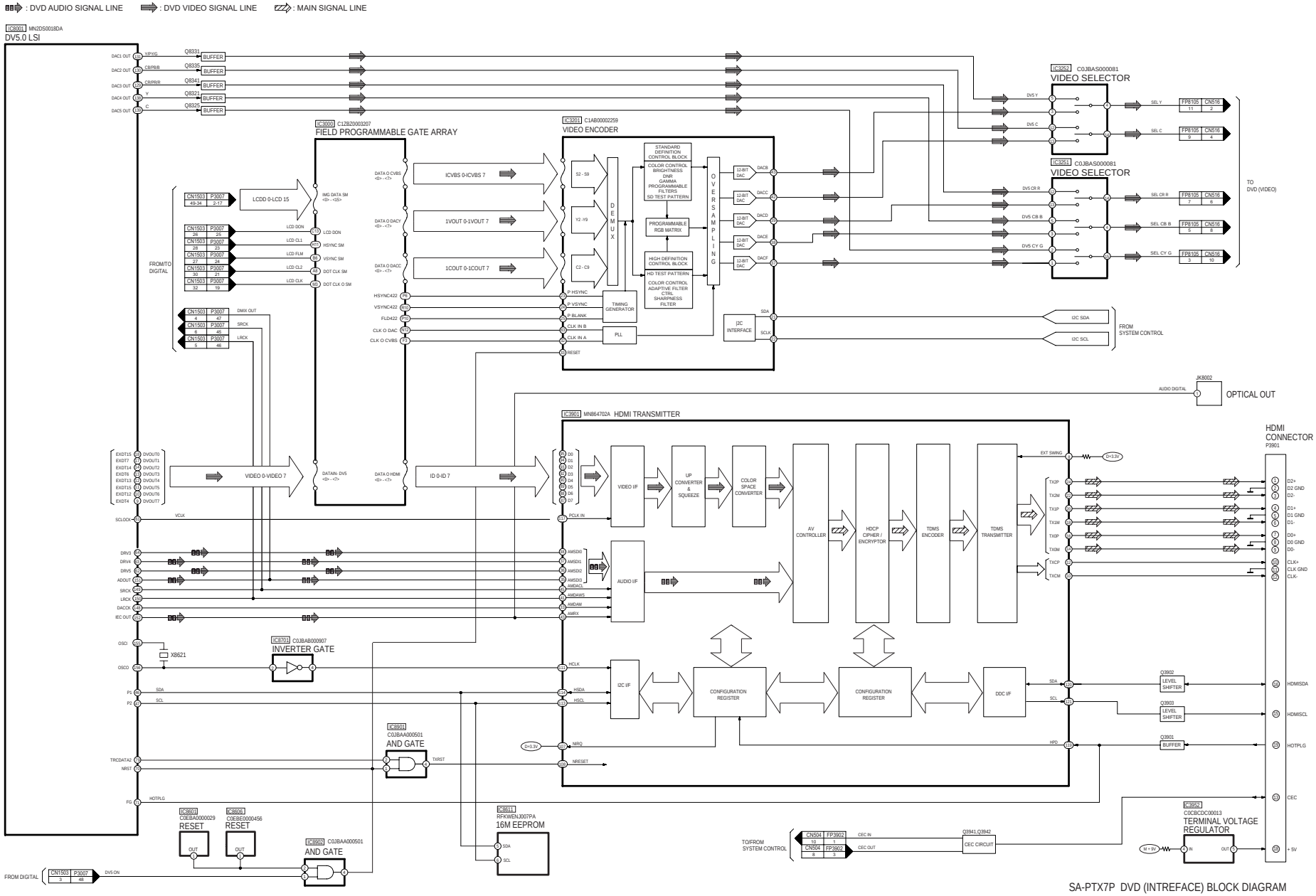
20.4. DVD (Video)

: DVD VIDEO SIGNAL LINE



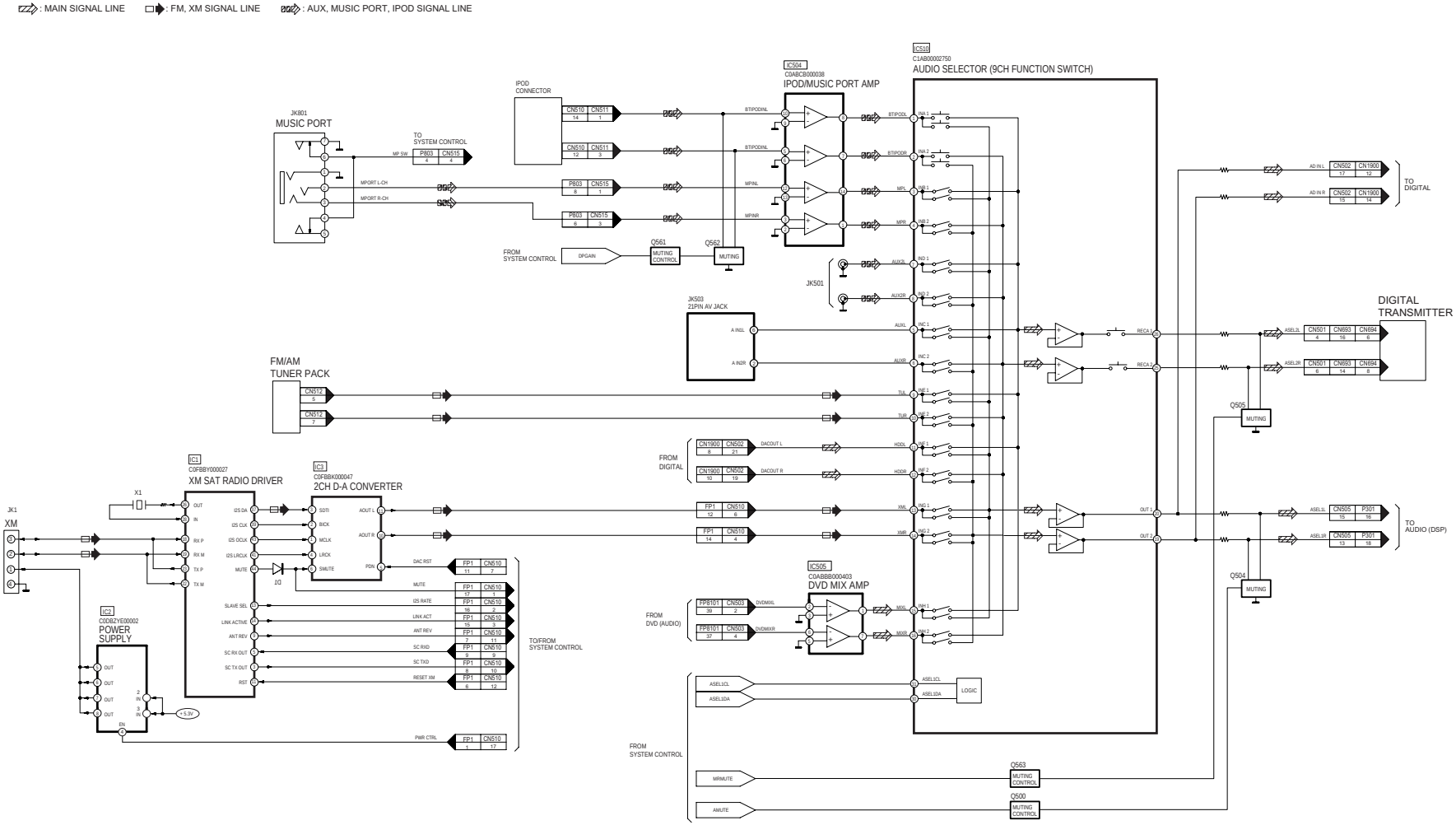
SA-PTX7P DVD (VIDEO) BLOCK DIAGRAM

20.5. DVD (Interface)



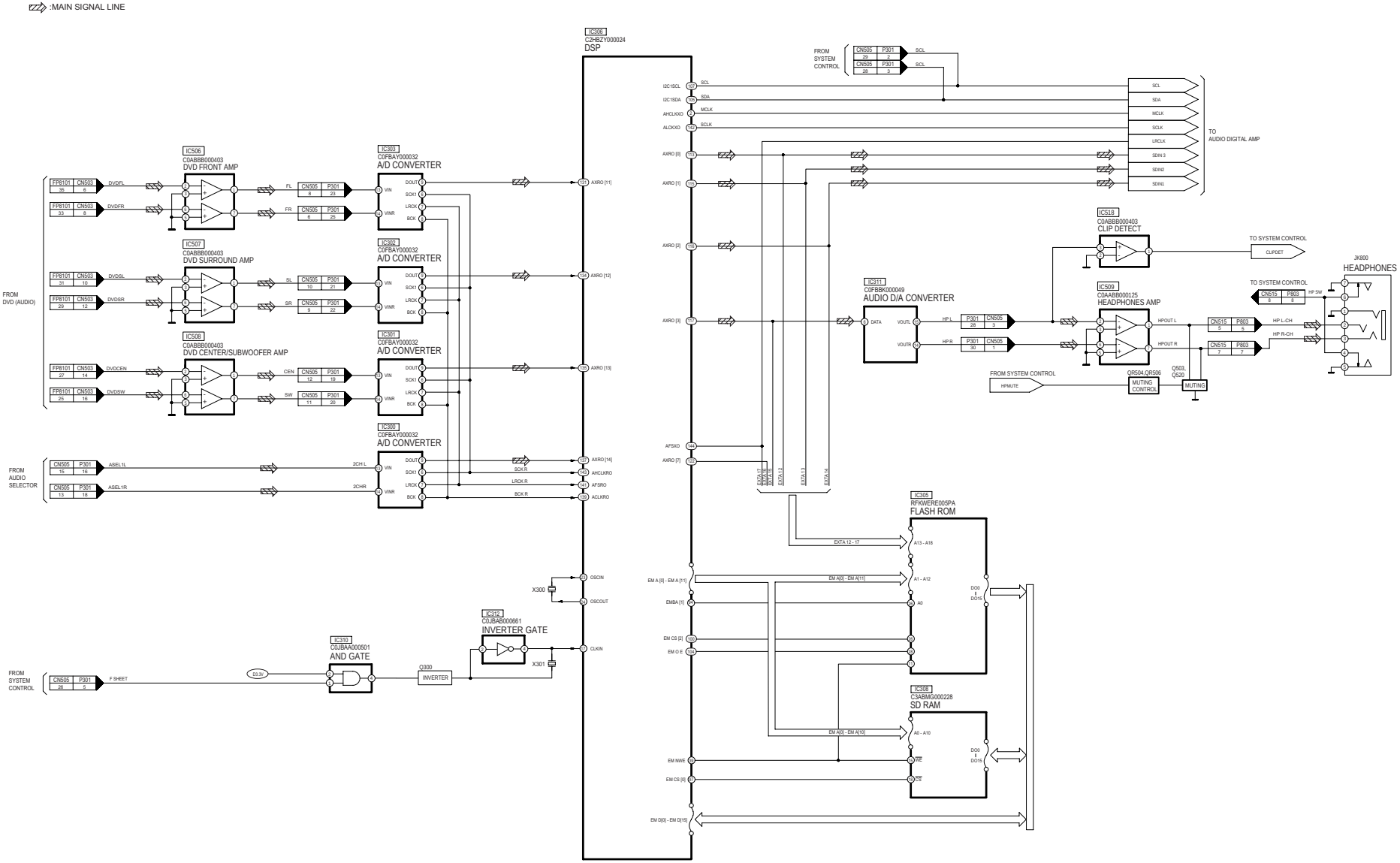
SA-PTX7P DVD (INTREFACE) BLOCK DIAGRAM

20.6. AUDIO SELECTOR



SA-PTX7P AUDIO SELECTOR BLOCK DIAGRAM

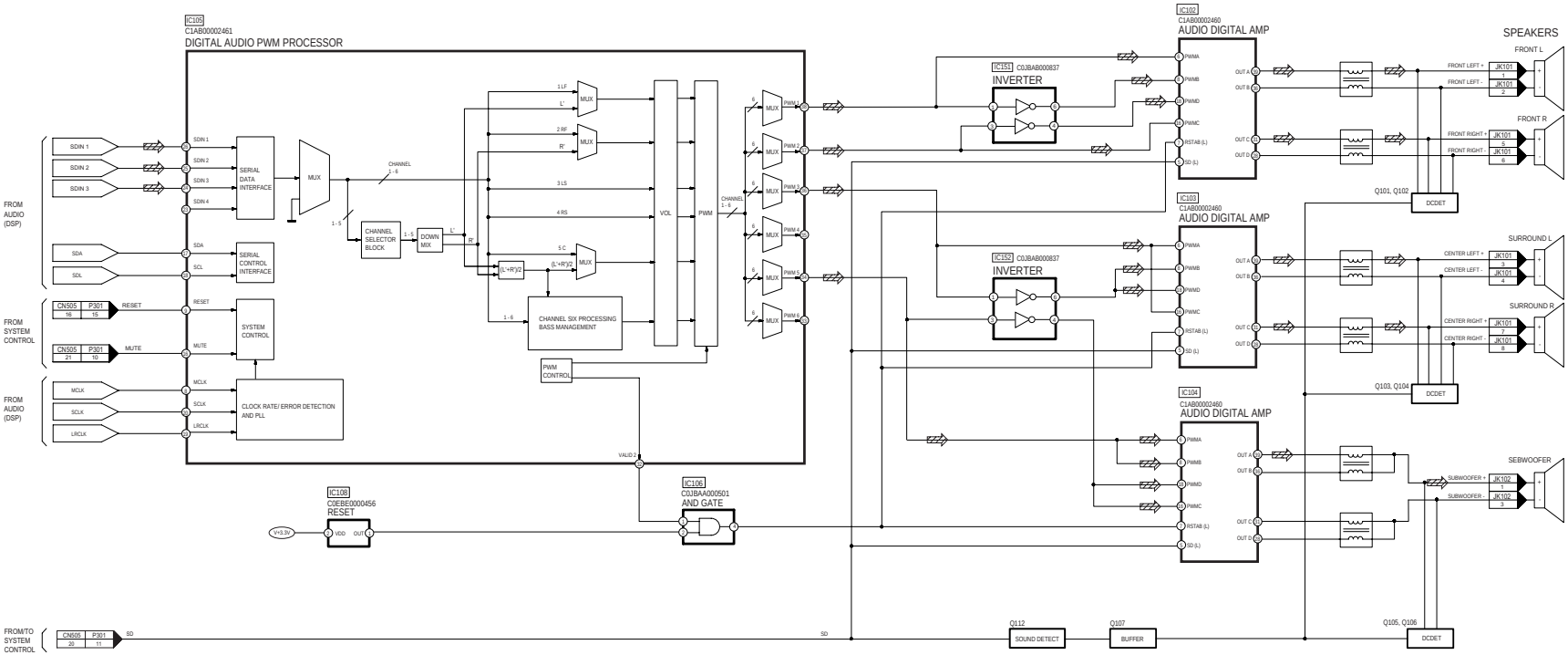
20.7. AUDIO (DSP)



SA-PTX7P AUDIO (DSP) BLOCK DIAGRAM

20.8. AUDIO DiGITAL AMP

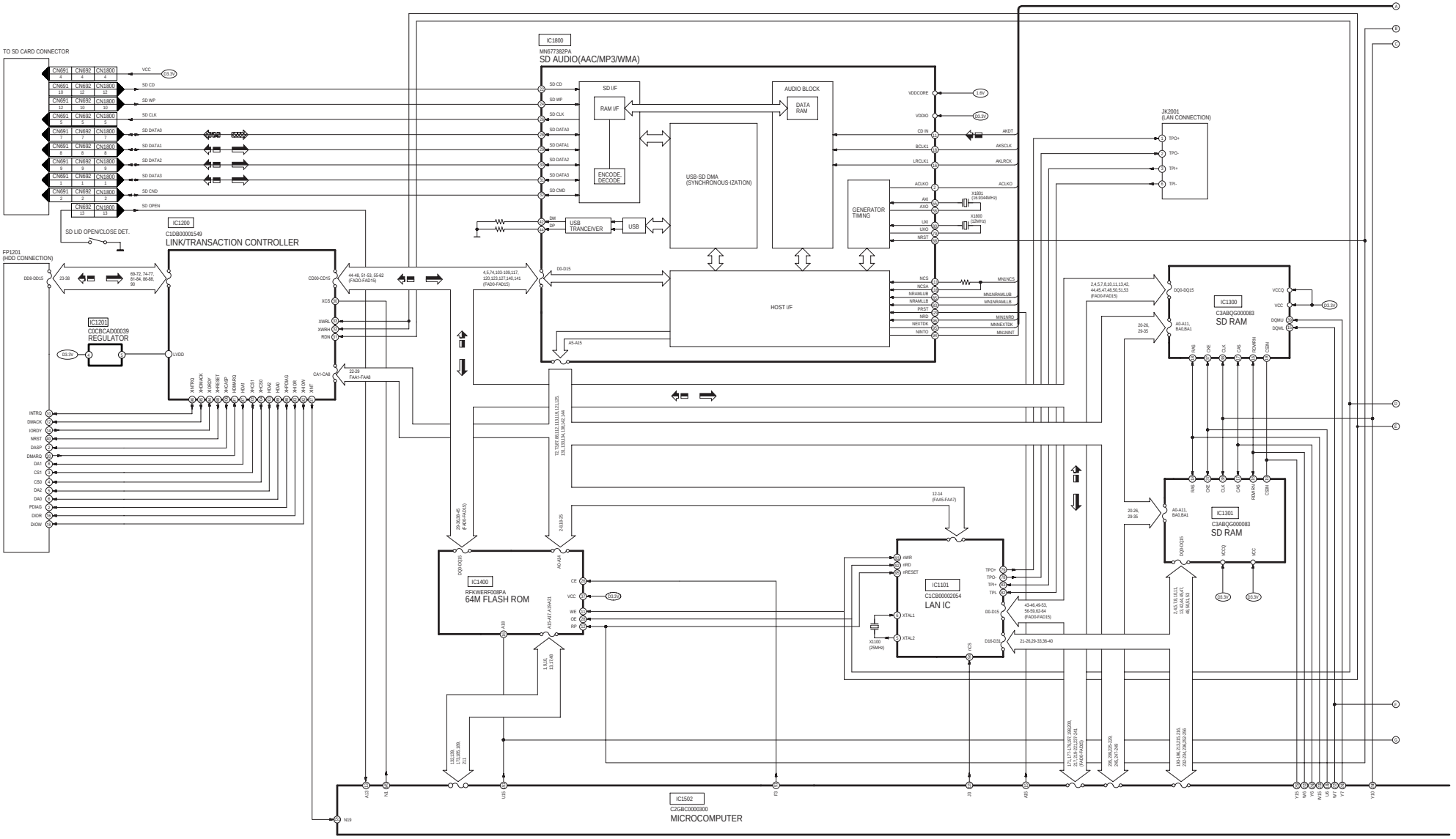
: MAIN SIGNAL LINE



SA-PTX7P AUDIO DIGITAL AMP BLOCK DIAGRAM

20.9. DIGITAL 1

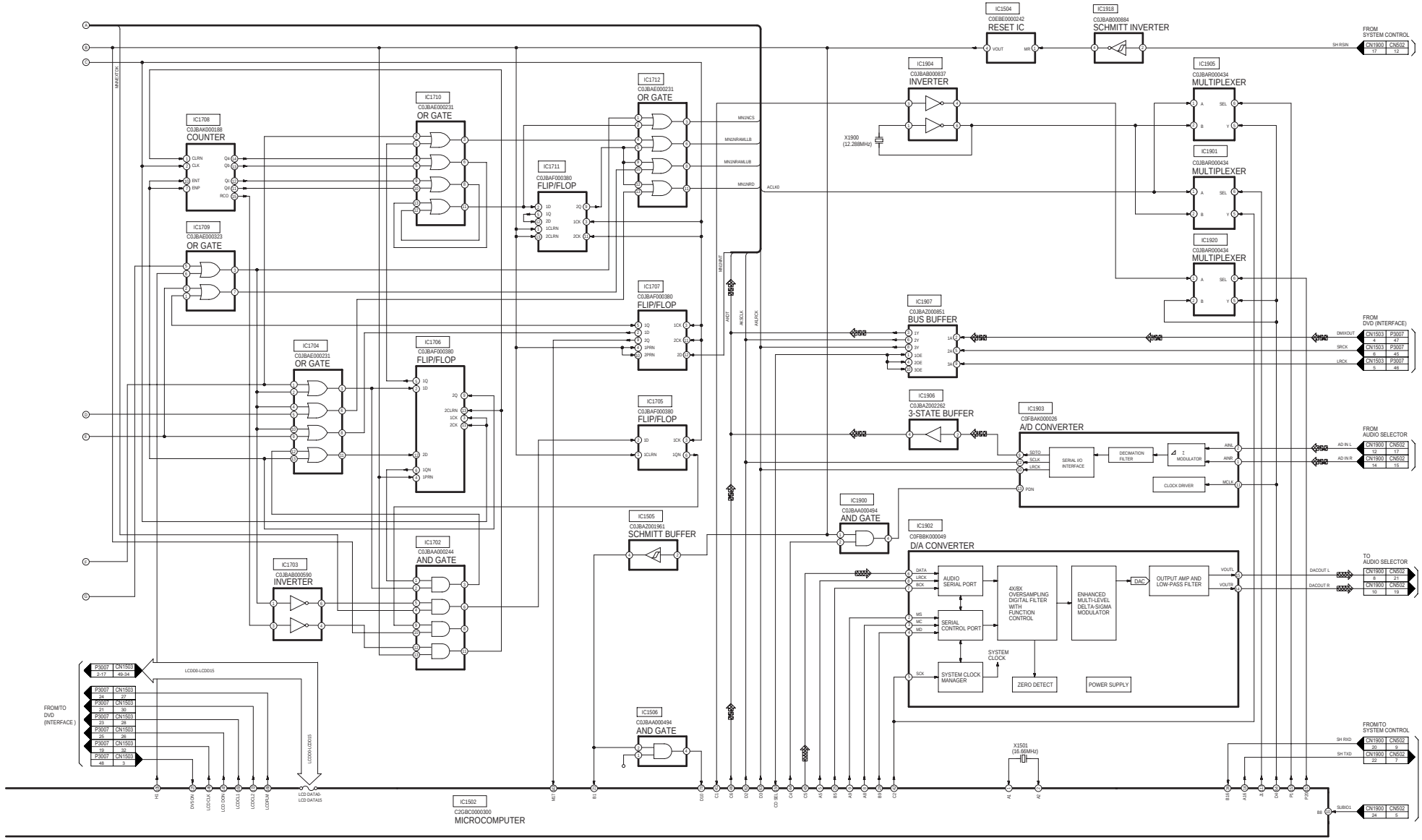
: DIGITAL AUDIO SIGNAL LINE : DIGITAL AUDIO REC SIGNAL LINE



SA-PXT7P DIGITAL BLOCK DIAGRAM

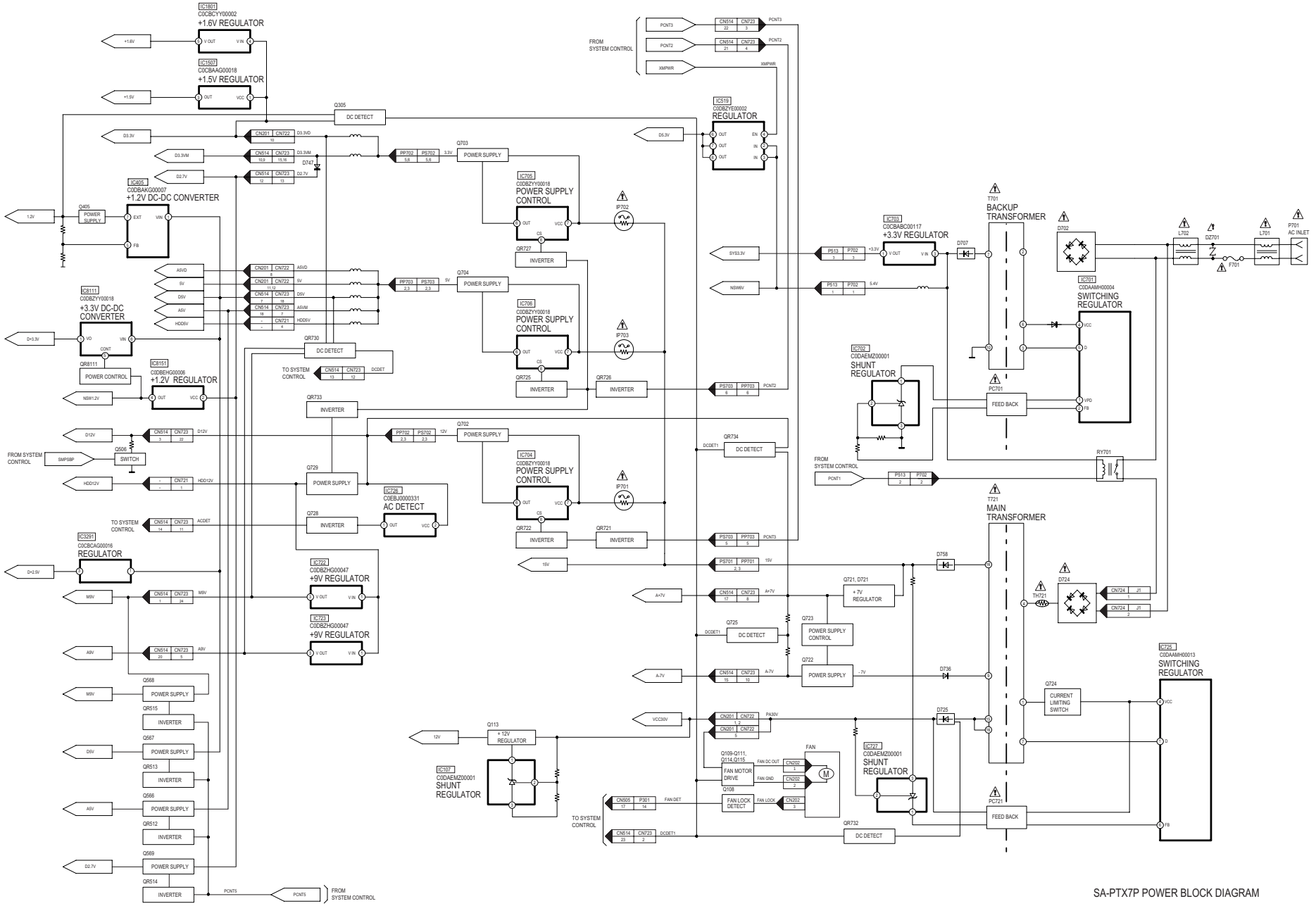
20.10. DIGITAL 2

: DIGITAL AUDIO SIGNAL LINE : DIGITAL AUDIO REC SIGNAL LINE



SA-PTX7P DIGITAL BLOCK DIAGRAM

20.11. POWER



SA-PTX7P POWER BLOCK DIAGRAM

21 Schematic Diagram Notes

- **This schematic diagram may be modified at any time with the development of new technology.**

Notes:

S800:	Power switch (POWER ⏻/|).
S801:	Open / close switch (OPEN / CLOSE ⏏),
S802:	SELECTOR < switch.
S803:	SELECTOR > switch.
S804:	R. skip switch (|◀◀ / ◀◀ / TUNING ∨).
S805:	F. skip switch (▶▶ / ▶▶| / TUNING ∧).
S806:	Stop switch (■).
S807:	Play switch (▶).
S808:	REC switch (● CD / ▶ HDD).
S901:	Play switch.
S902:	Open switch.
VR800:	VR volume jog.

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety.

  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

  When replacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

- In case of AC rated voltage Capacitor, the part no. and values will be indicated in the Schematic Diagram.

  AC rated voltage capacitor:

  C701, C702, C703, C704, C705, C706, C707, C748

- **Resistor**

  Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

- **Capacitor**

  Unit of capacitance is µF, unless otherwise noted. F=Farad, pF=Pico-Farad

- **Coil**

  Unit of inductance is H, unless otherwise noted.

- **Test Pad**

  TP : Test Pad position.

- **Test Land**

  TL : Test Land position.

- Voltage and signal line

  : +B signal line

  : -B signal line

  : DVD RF signal line

  : Motor Drive signal line

  : DVD/CD Audio signal line

  : DVD Video signal line

  : CD Head signal line

  : DVD Head signal line

  : Main signal line

  : Tracking Error signal line

  : Focus Error signal line

  : FM, XM, AM signal line

  : AUX, Ipod, Music Port signal line

  : Digital Audio signal line

  : Digital Audio Rec signal line

  : Optical Digital Audio signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 51MS F701 4A 125V FUSE

RISK OF FIRE-REPLACE FUSE AS MARKED.

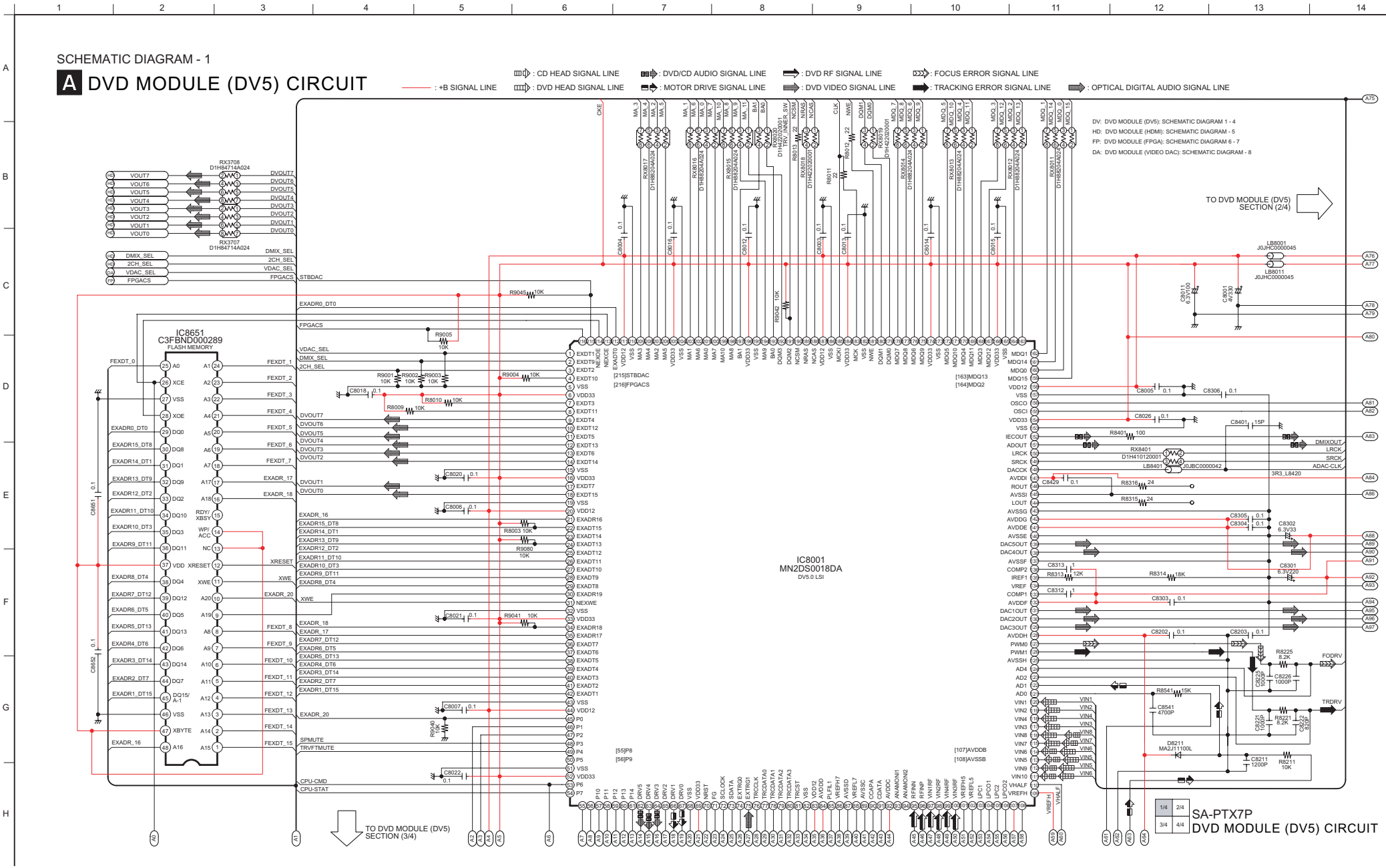
FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

Ce symbole indique que le fusible utilisé est à rapido. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

22 Schematic Diagram

22.1. DVD Module (DV5/HDMI/FPGA/VIDEO DAC) Circuit

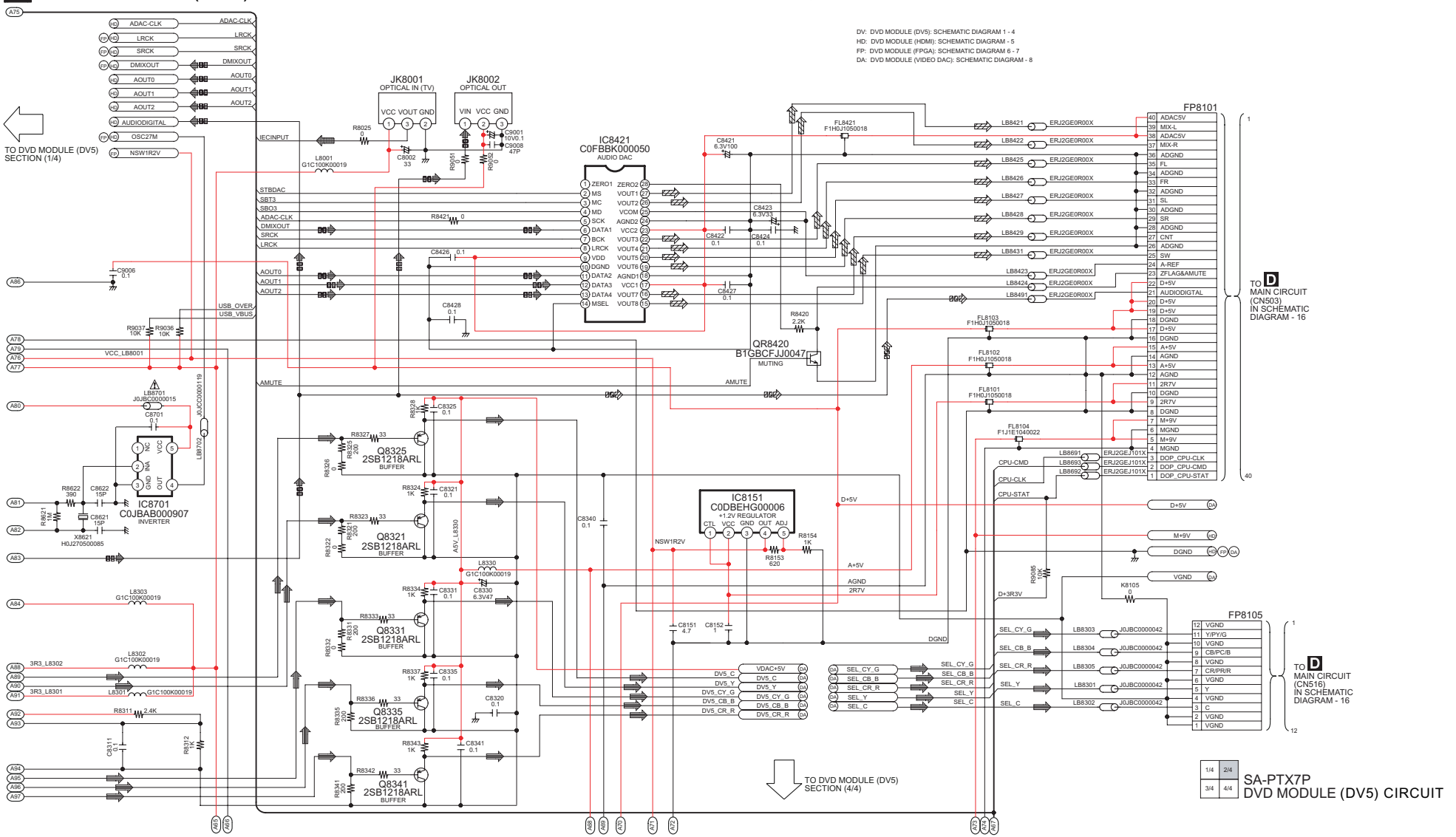

SCHEMATIC DIAGRAM - 1
A DVD MODULE (DV5) CIRCUIT
: +B SIGNAL LINE
: CD HEAD SIGNAL LINE
: DVD HEAD SIGNAL LINE
: DVD/CD AUDIO SIGNAL LINE
: MOTOR DRIVE SIGNAL LINE
: DVD RF SIGNAL LINE
: DVD VIDEO SIGNAL LINE
: FOCUS ERROR SIGNAL LINE
: TRACKING ERROR SIGNAL LINE
: OPTICAL DIGITAL AUDIO SIGNAL LINE
DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5
FP: DVD MODULE (FPGA): SCHEMATIC DIAGRAM 6 - 7
DA: DVD MODULE (VIDEO DAC): SCHEMATIC DIAGRAM - 8
TO DVD MODULE (DV5) SECTION (2/4)
TO DVD MODULE (DV5) SECTION (3/4)
IC8651
C3FBND000289
FLASH MEMORY
IC8001
MN2DS0018DA
DV5.0 LSI
SA-PTX7P
DVD MODULE (DV5) CIRCUIT
1/4 2/4 3/4 4/4

SCHEMATIC DIAGRAM - 2

A DVD MODULE (DV5) CIRCUIT

: +B SIGNAL LINE : DVD AUDIO SIGNAL LINE : DVD VIDEO SIGNAL LINE : MAIN SIGNAL LINE : OPTICAL DIGITAL AUDIO SIGNAL LINE

DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5
FP: DVD MODULE (FPGA): SCHEMATIC DIAGRAM 6 - 7
DA: DVD MODULE (VIDEO DAC): SCHEMATIC DIAGRAM - 8

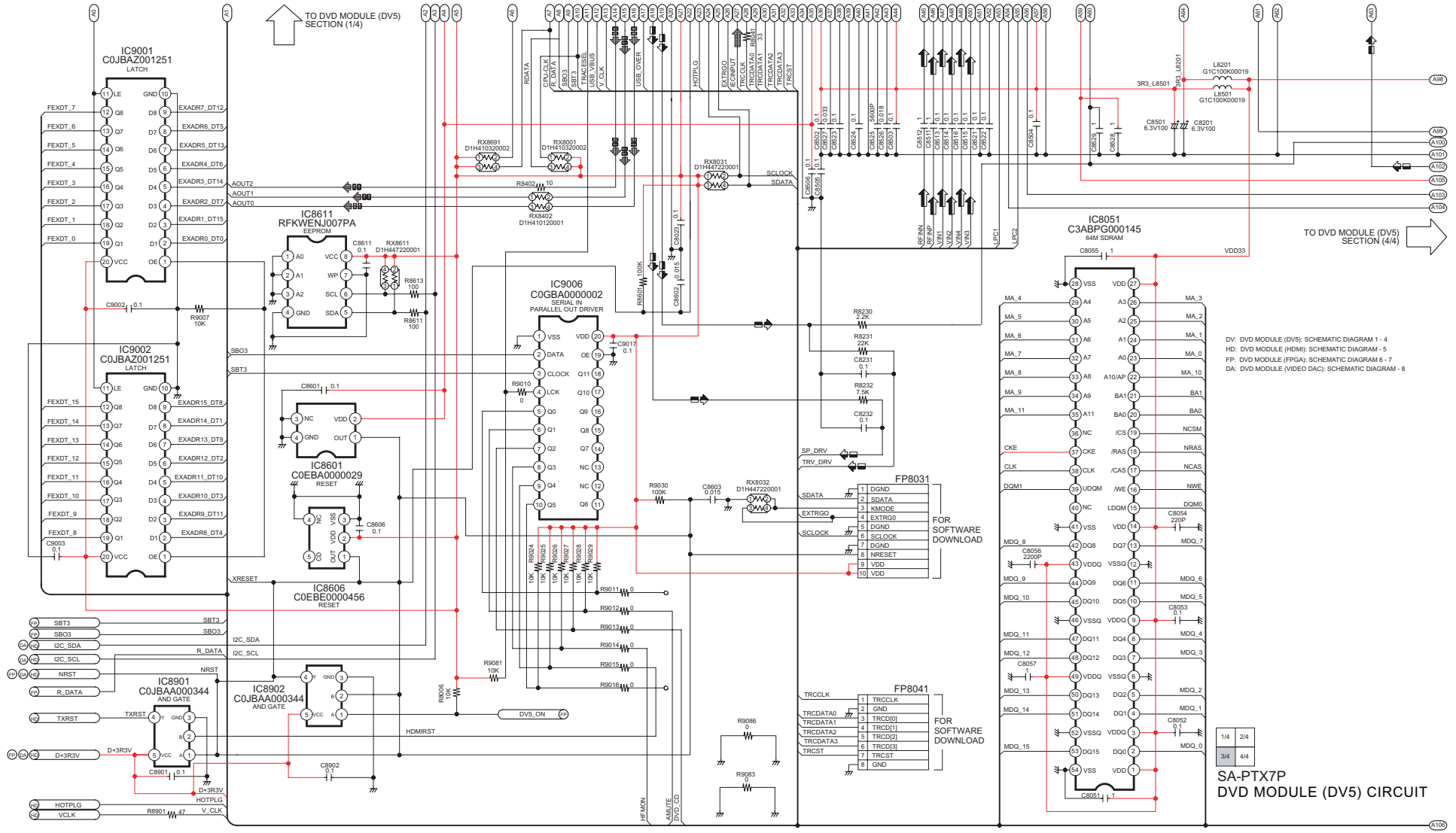

TO DVD MODULE (DV5) SECTION (1/4)
JK8001 OPTICAL IN (TV)
JK8002 OPTICAL OUT
IC8421 C0FBBK000050 AUDIO DAC
QR8420 B1GBCFJJ0047 MUTING
IC8151 C0DBEHG00006 +1.2V REGULATOR
IC8701 C0JBAB000907 INVERTER
Q8325 2SB1218ARL BUFFER
Q8321 2SB1218ARL BUFFER
Q8331 2SB1218ARL BUFFER
Q8335 2SB1218ARL BUFFER
Q8341 2SB1218ARL BUFFER
FP8101
FP8105
TO D MAIN CIRCUIT (CN503) IN SCHEMATIC DIAGRAM - 16
TO D MAIN CIRCUIT (CN516) IN SCHEMATIC DIAGRAM - 16
TO DVD MODULE (DV5) SECTION (4/4)

SA-PTX7P
DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 3

A DVD MODULE (DV5) CIRCUIT

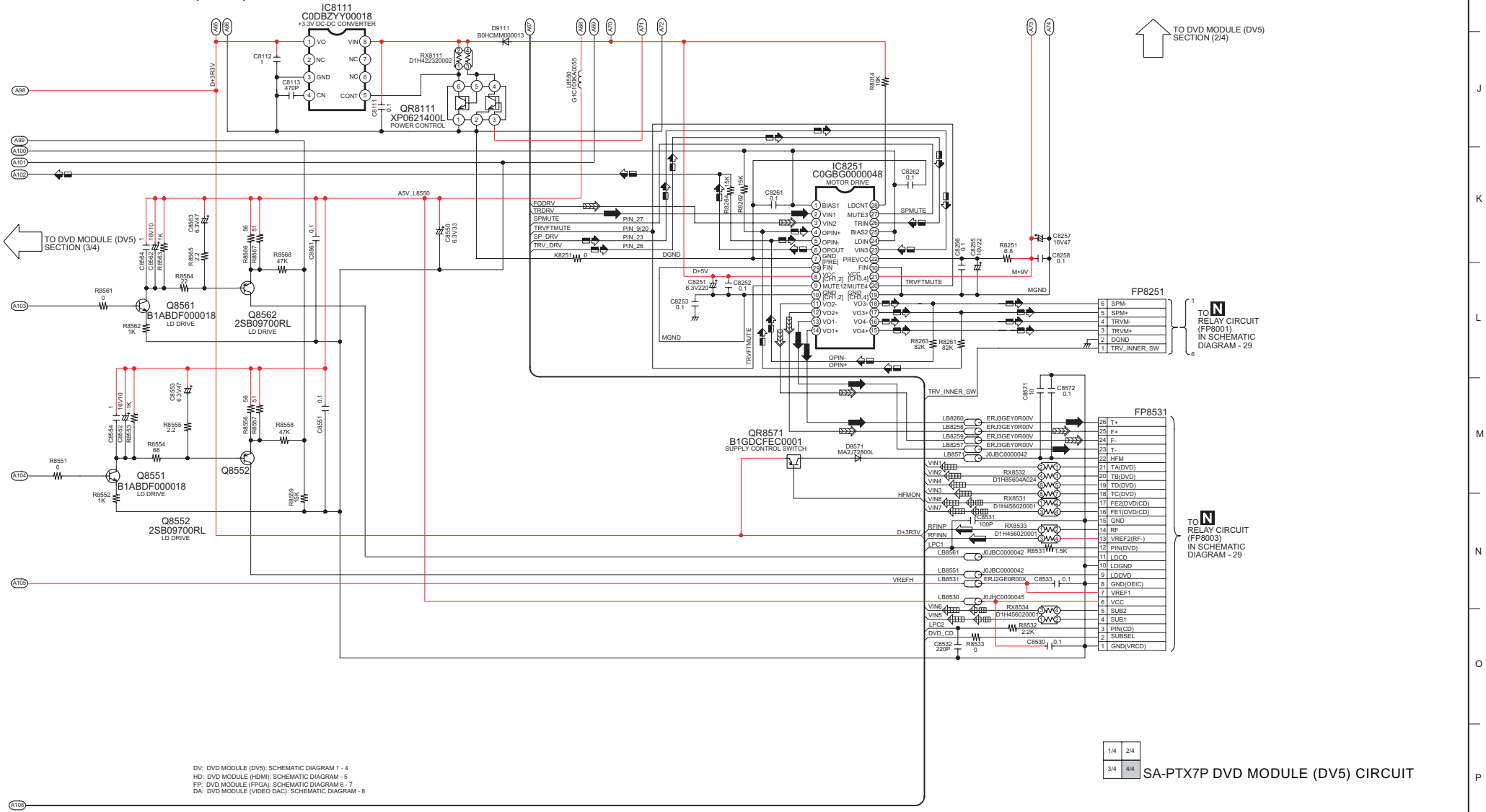
: +B SIGNAL LINE : DVD HEAD SIGNAL LINE : MOTOR DRIVE SIGNAL LINE : DVD RF SIGNAL LINE : DVD AUDIO SIGNAL LINE : OPTICAL DIGITAL AUDIO SIGNAL LINE


TO DVD MODULE (DV5) SECTION (1/4)
IC9001 C0JBAZ001251 LATCH
IC9002 C0JBAZ001251 LATCH
IC8611 RFKWENJ007PA EEPROM
IC9006 C0GBA0000002 SERIAL IN PARALLEL OUT DRIVER
IC8601 C0EBA0000029 RESET
IC8606 C0EBE0000456 RESET
IC8901 C0JBAA000344 AND GATE
IC8902 C0JBAA000344 AND GATE
IC8051 C3ABPG000145 64M SDRAM
FP8031
FP8041
FOR SOFTWARE DOWNLOAD
TO DVD MODULE (DV5) SECTION (4/4)
DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5
FP: DVD MODULE (FPGA): SCHEMATIC DIAGRAM 6 - 7
DA: DVD MODULE (VIDEO DAC): SCHEMATIC DIAGRAM - 8
SA-PTX7P
DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 4

A DVD MODULE (DV5) CIRCUIT

: +B SIGNAL LINE
: CD HEAD SIGNAL LINE
: DVD HEAD SIGNAL LINE
: MOTOR DRIVE SIGNAL LINE
: TRACKING ERROR SIGNAL LINE
: DVD RF SIGNAL LINE
: FOCUS ERROR SIGNAL LINE



DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5
FP: DVD MODULE (FPGA): SCHEMATIC DIAGRAM 6 - 7
DA: DVD MODULE (VIDEO DAC): SCHEMATIC DIAGRAM - 8

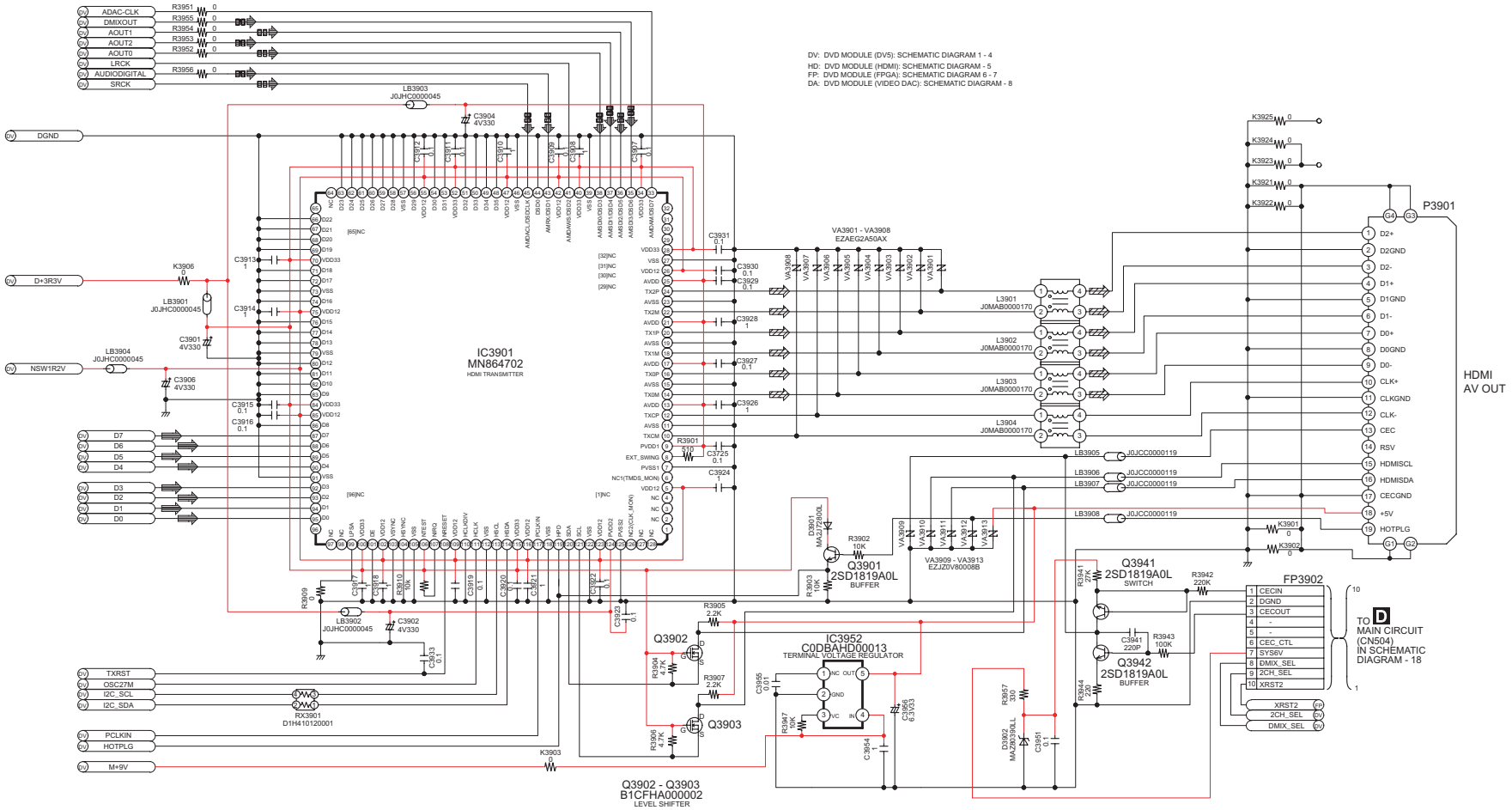
1/4	2/4
3/4	4/4

SA-PTX7P DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 5

A DVD MODULE (HDMI) CIRCUIT

:+B SIGNAL LINE : MAIN SIGNAL LINE : CD, DVD AUDIO SIGNAL LINE : DVD VIDEO SIGNAL LINE

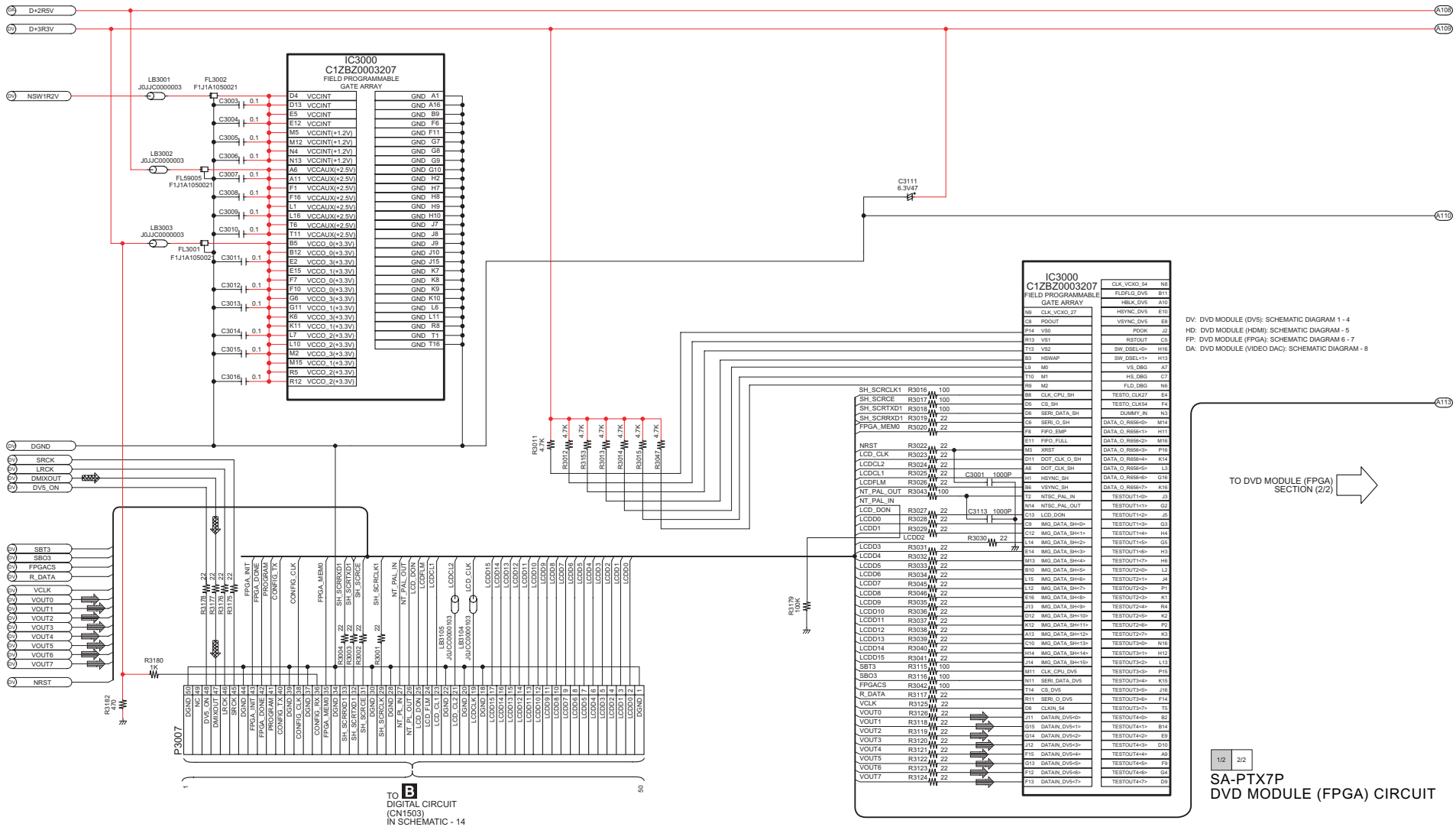


SA-PTX7P DVD MODULE (HDMI) CIRCUIT

SCHEMATIC DIAGRAM - 6

A DVD MODULE (FPGA) CIRCUIT

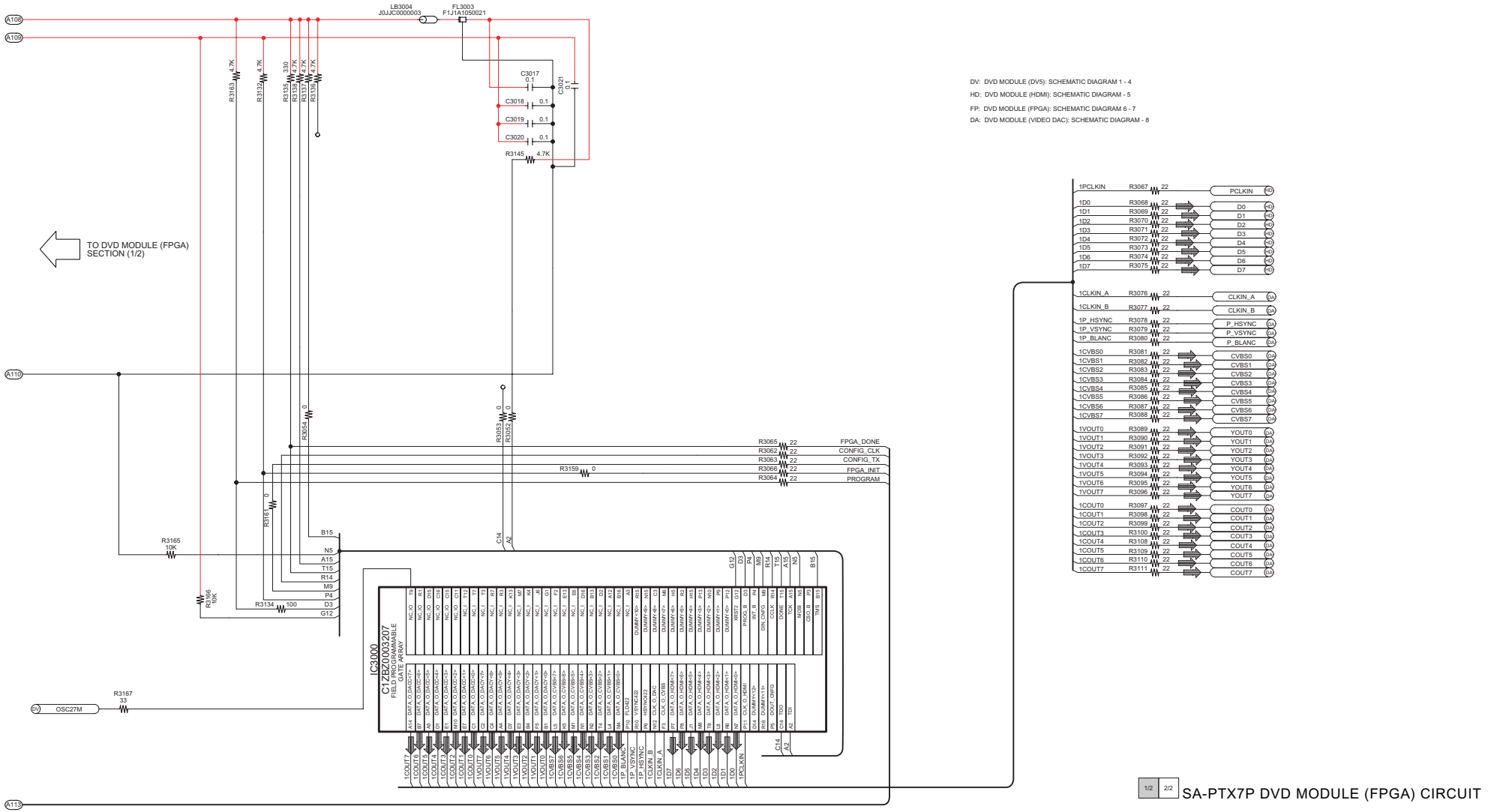
—— :+B SIGNAL LINE ⇒ : DVD VIDEO SIGNAL LINE ⇒ : DIGITAL AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM - 7

A DVD MODULE (FPGA) CIRCUIT

:+B SIGNAL LINE : DVD VIDEO SIGNAL LINE : DIGITAL AUDIO SIGNAL LINE

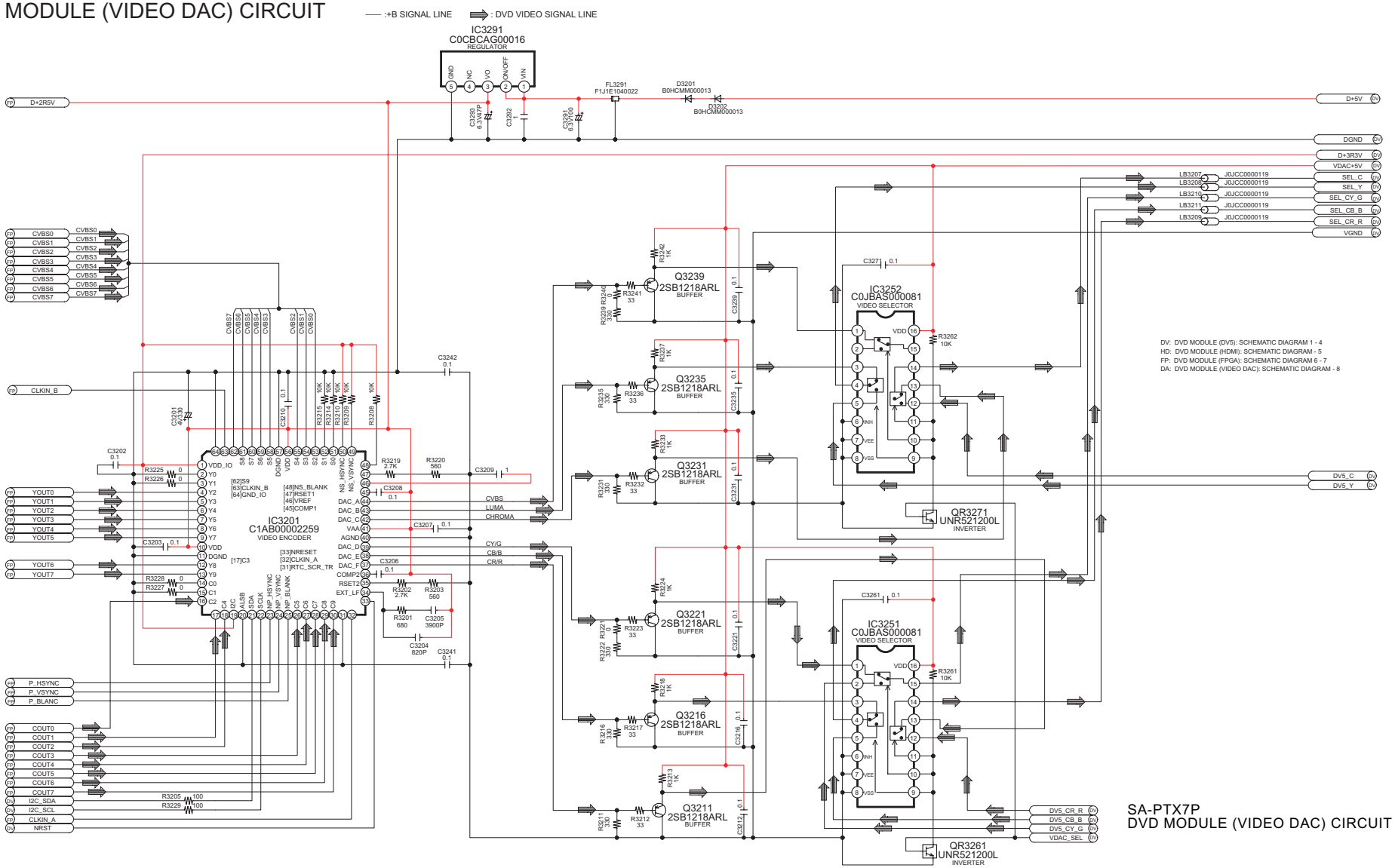


DV: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5
FP: DVD MODULE (FPGA): SCHEMATIC DIAGRAM 6 - 7
DA: DVD MODULE (VIDEO DAC): SCHEMATIC DIAGRAM - 8

1/2 2/2 SA-PTX7P DVD MODULE (FPGA) CIRCUIT

SCHEMATIC DIAGRAM - 8

A DVD MODULE (VIDEO DAC) CIRCUIT

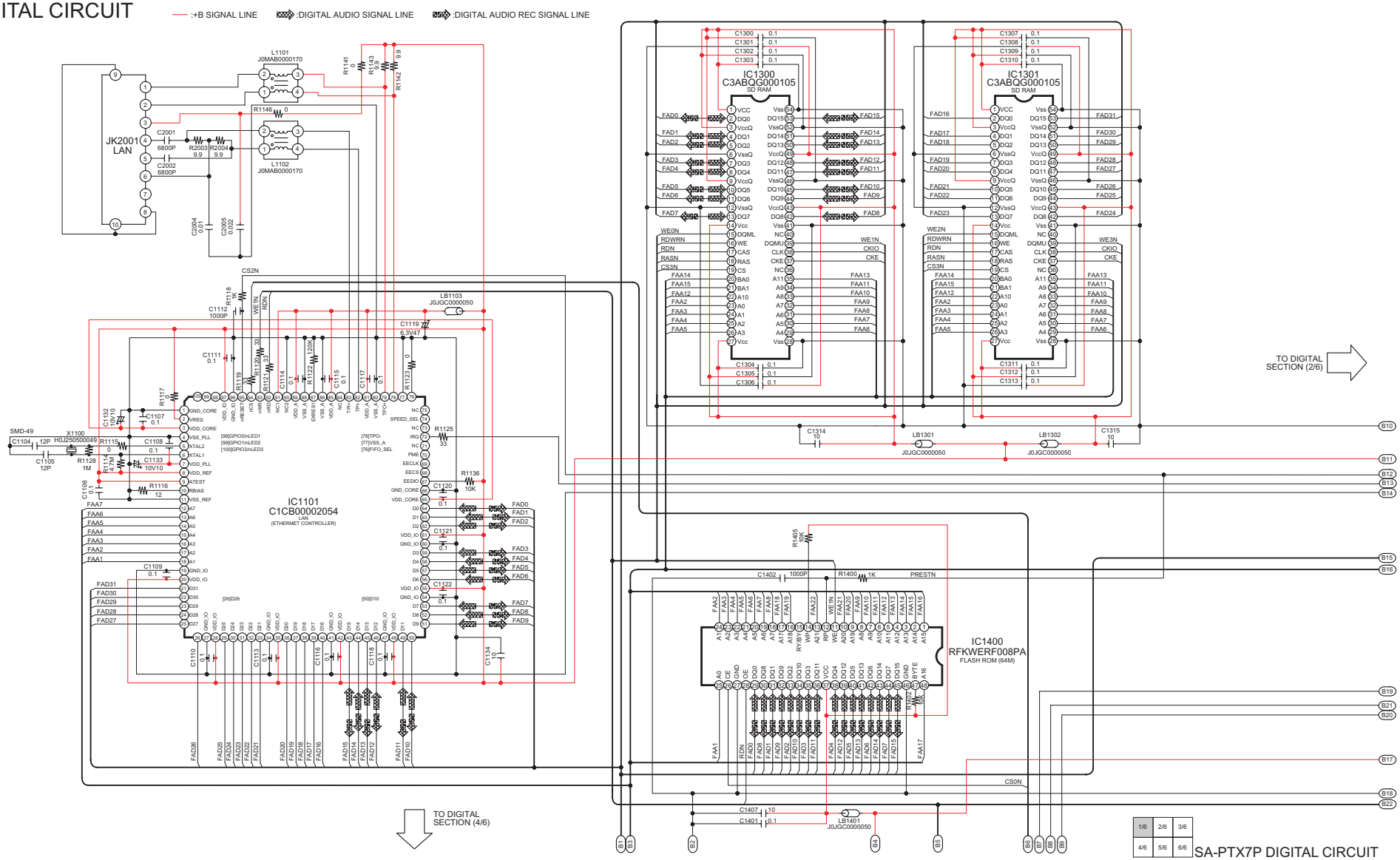


22.2. Digital & XM Module Circuit

SCHEMATIC DIAGRAM - 9

B DIGITAL CIRCUIT

—— :+B SIGNAL LINE ⋙ :DIGITAL AUDIO SIGNAL LINE ⋙ :DIGITAL AUDIO REC SIGNAL LINE



1/6 | 2/6 | 3/6 | 4/6 | 5/6 | 6/6

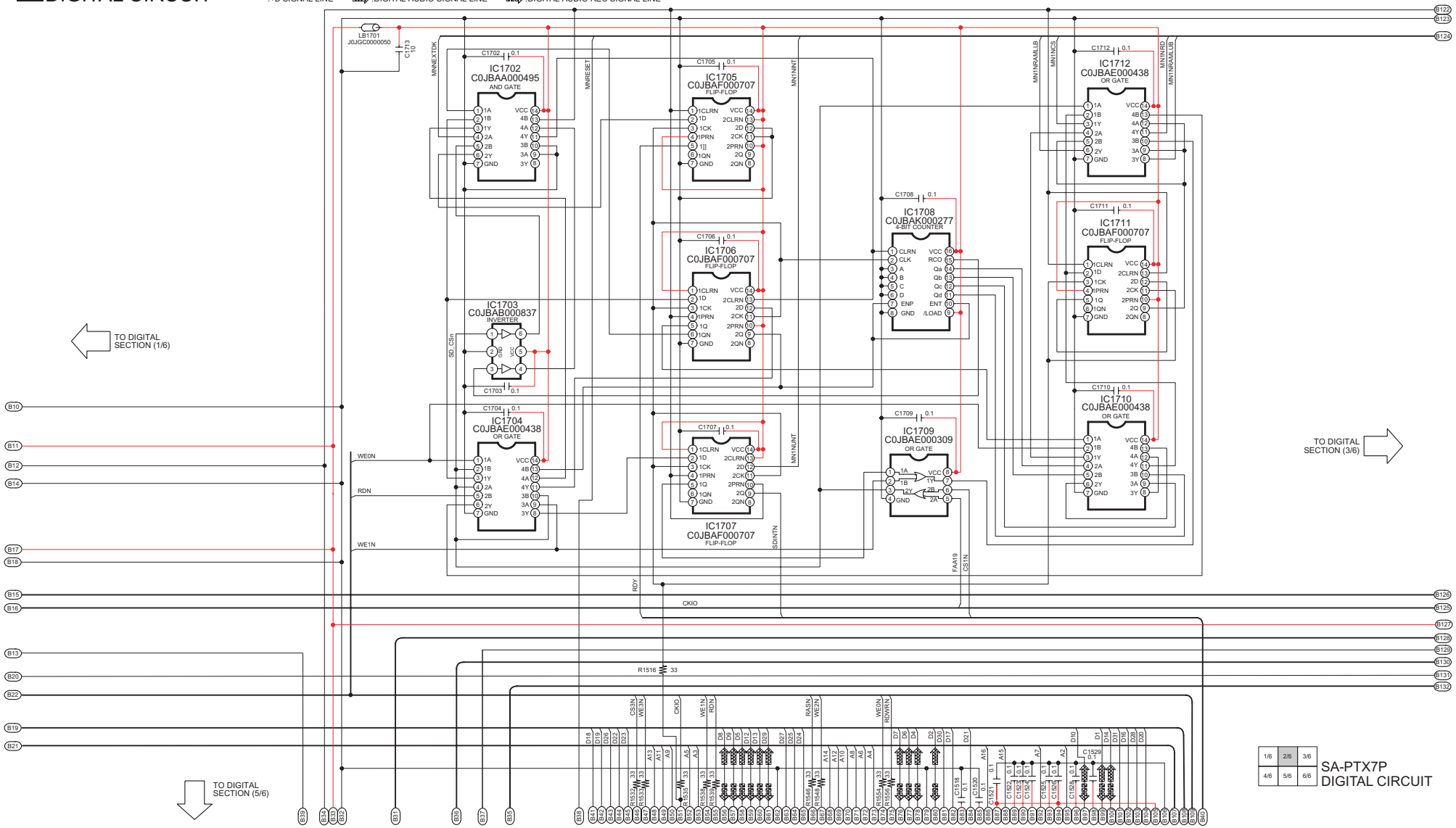
SA-PTX7P DIGITAL CIRCUIT

15 16 17 18 19 20 21 22 23 24 25 26 27 28

SCHEMATIC DIAGRAM - 10

B DIGITAL CIRCUIT

—— :+B SIGNAL LINE ▨ :DIGITAL AUDIO SIGNAL LINE ▨ :DIGITAL AUDIO REC SIGNAL LINE



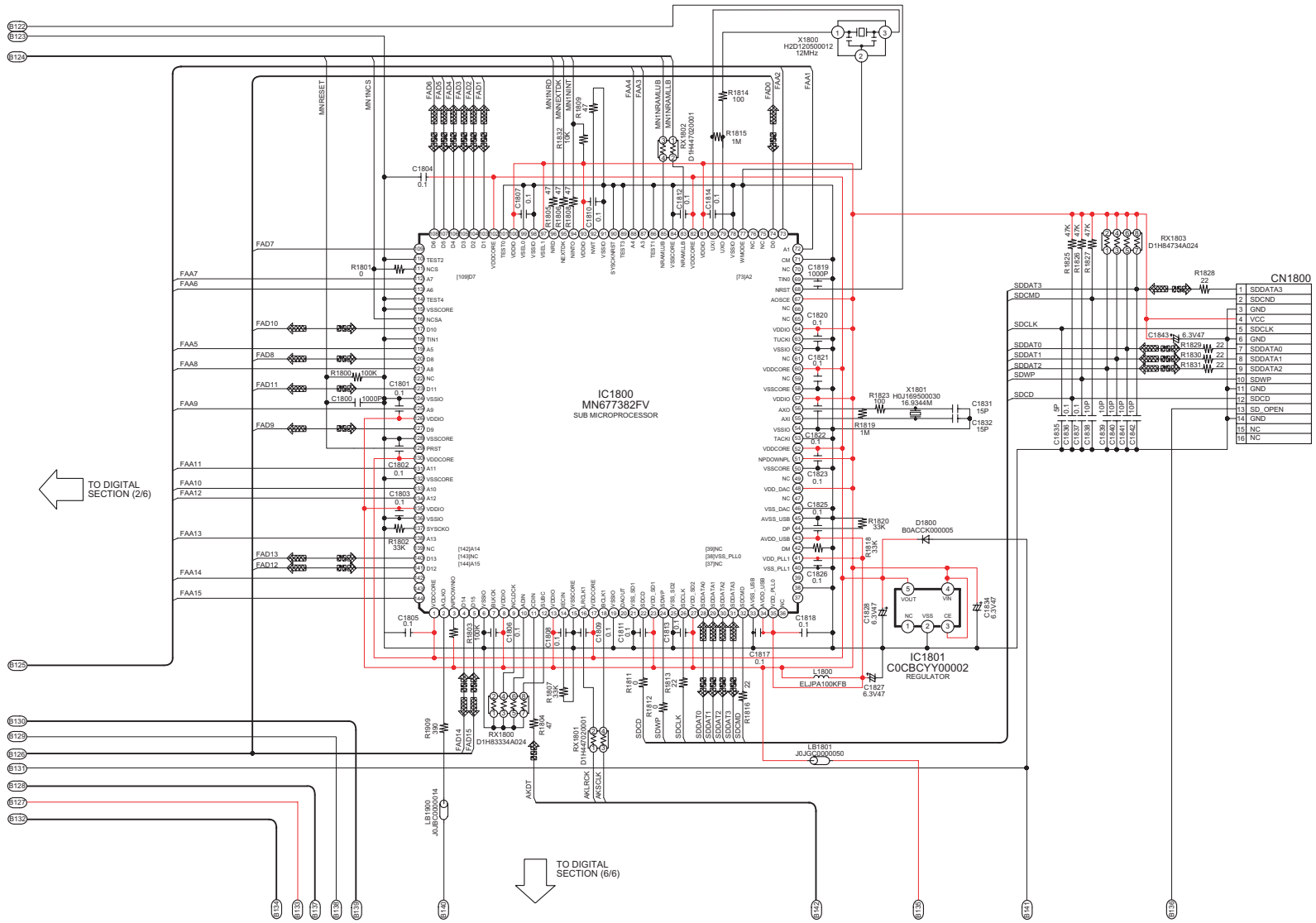
1/6	2/6	3/6
4/6	5/6	6/6

SA-PTX7P
DIGITAL CIRCUIT

SCHEMATIC DIAGRAM - 11

B DIGITAL CIRCUIT

—— :+B SIGNAL LINE ⇔ :DIGITAL AUDIO SIGNAL LINE ⇔ :DIGITAL AUDIO REC SIGNAL LINE



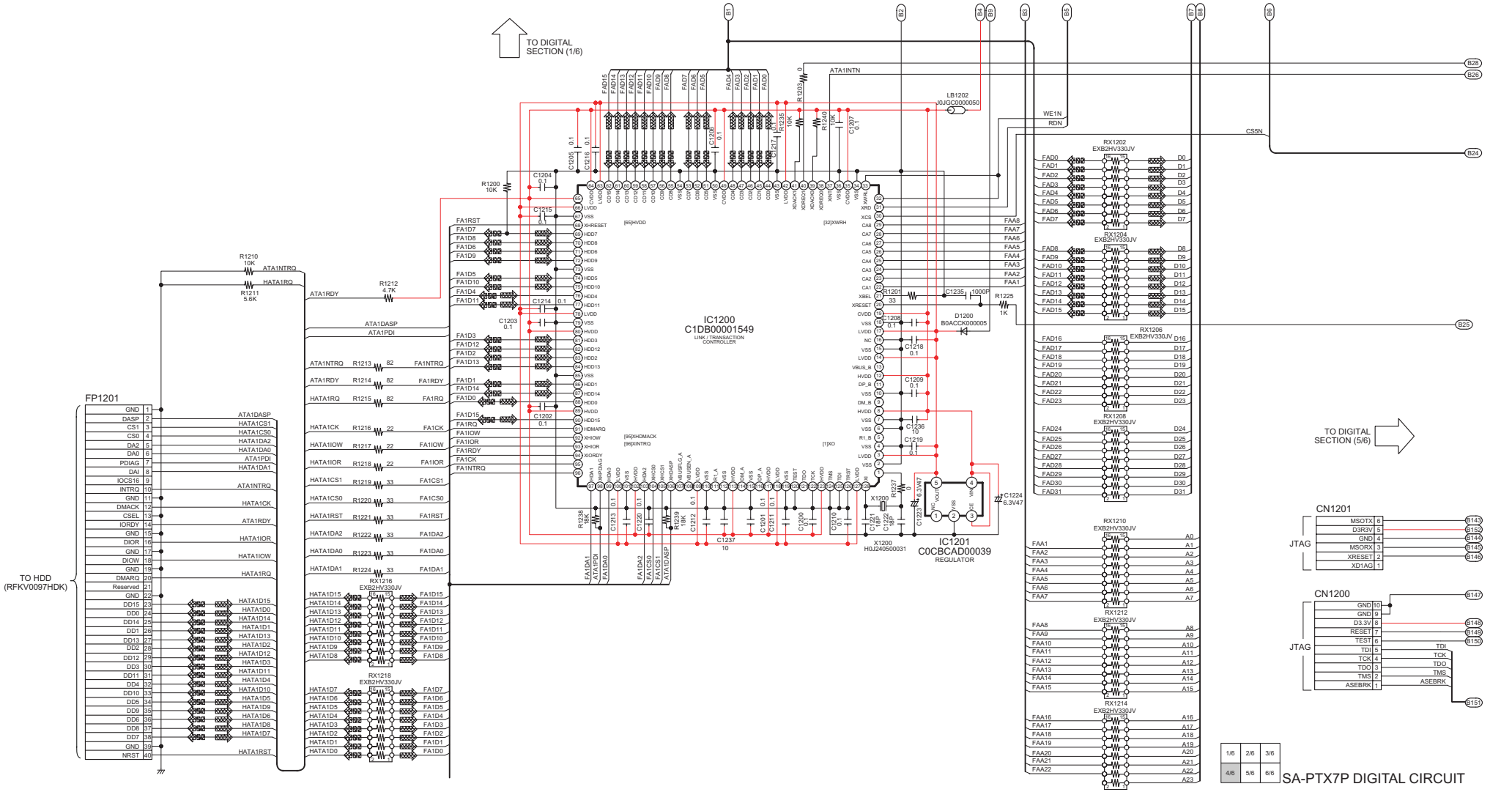
1/6 2/6 3/6
4/6 5/6 6/6

SA-PTX7P DIGITAL CIRCUIT

SCHEMATIC DIAGRAM - 12

B DIGITAL CIRCUIT

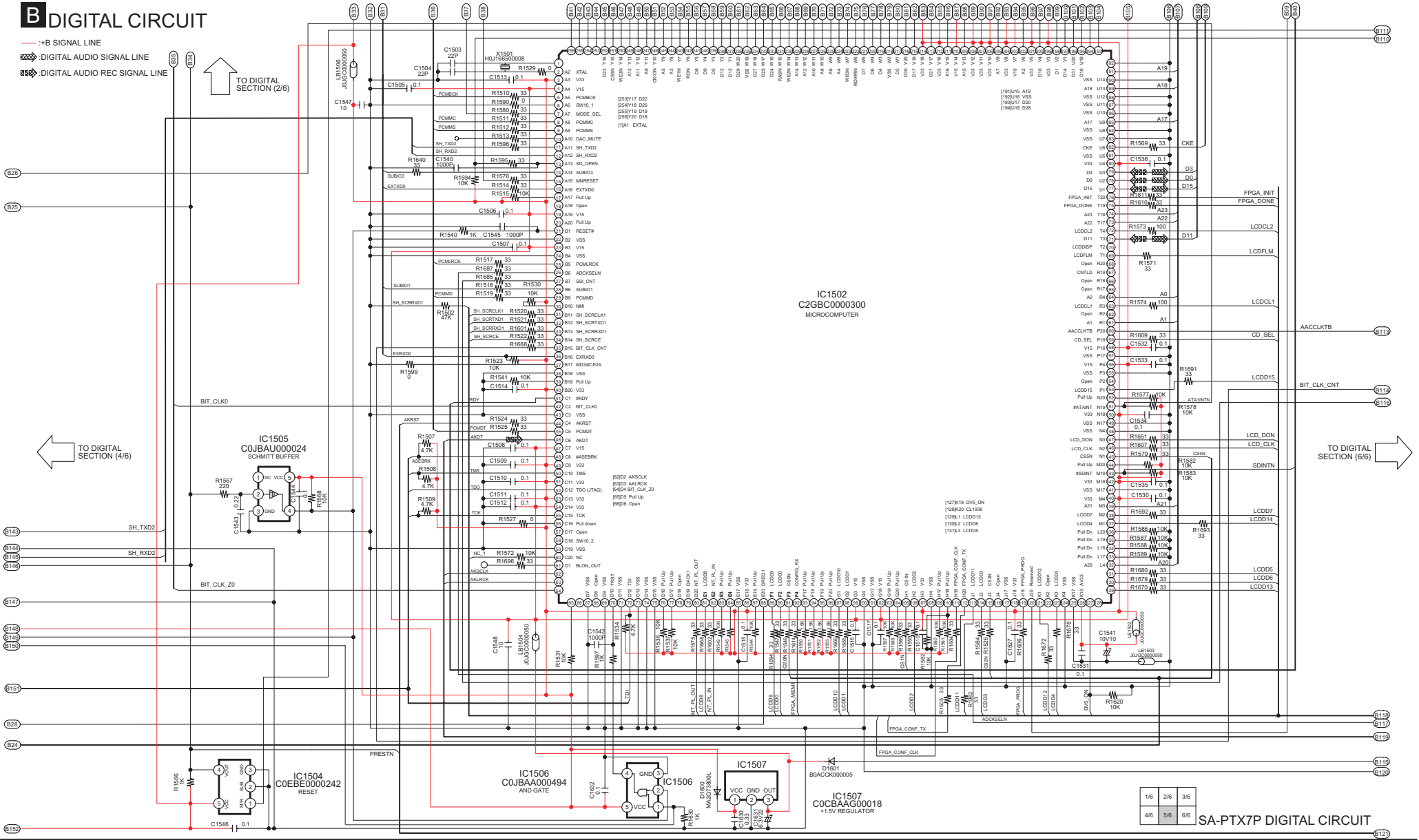
—— :+B SIGNAL LINE :DIGITAL AUDIO SIGNAL LINE :DIGITAL AUDIO REC SIGNAL LINE



SCHEMATIC DIAGRAM - 13

B DIGITAL CIRCUIT

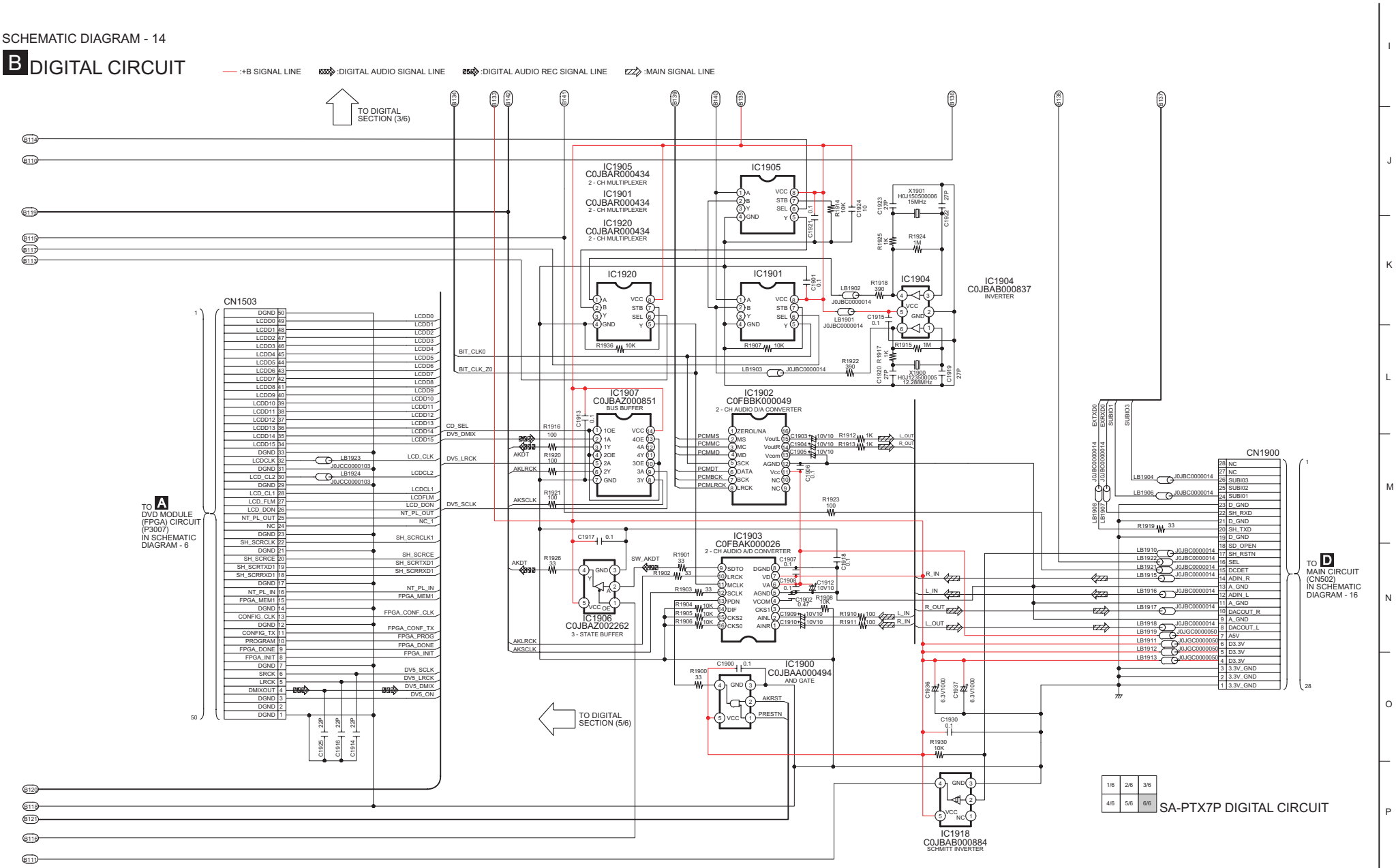
:+B SIGNAL LINE
:DIGITAL AUDIO SIGNAL LINE
:DIGITAL AUDIO REC SIGNAL LINE



SCHEMATIC DIAGRAM - 14

B DIGITAL CIRCUIT

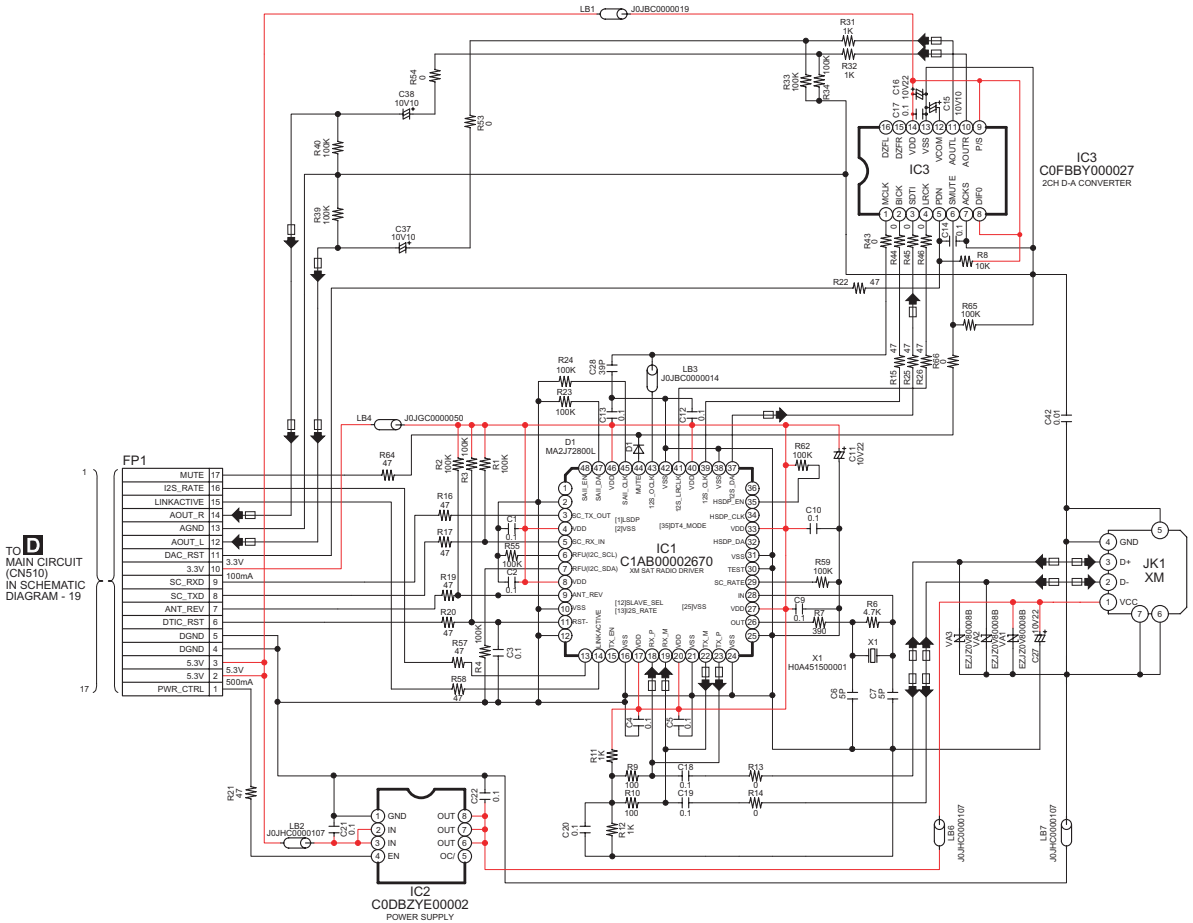
—— :+B SIGNAL LINE :DIGITAL AUDIO SIGNAL LINE :DIGITAL AUDIO REC SIGNAL LINE :MAIN SIGNAL LINE


TO DIGITAL SECTION (3/6)
IC1905 C0JBAR000434 2 - CH MULTIPLEXER
IC1901 C0JBAR000434 2 - CH MULTIPLEXER
IC1920 C0JBAR000434 2 - CH MULTIPLEXER
IC1904 C0JBAB000837 INVERTER
IC1907 C0JBAZ000851 BUS BUFFER
IC1902 C0FBBK000049 2 - CH AUDIO D/A CONVERTER
IC1903 C0FBAK000026 2 - CH AUDIO A/D CONVERTER
IC1906 C0JBAZ002262 3 - STATE BUFFER
IC1900 C0JBAA000494 AND GATE
IC1918 C0JBAB000884 SCHMITT INVERTER
CN1503
CN1900
TO A DVD MODULE (FPGA) CIRCUIT (P3007) IN SCHEMATIC DIAGRAM - 6
TO D MAIN CIRCUIT (CN502) IN SCHEMATIC DIAGRAM - 16
TO DIGITAL SECTION (5/6)
SA-PTX7P DIGITAL CIRCUIT

SCHEMATIC DIAGRAM - 15

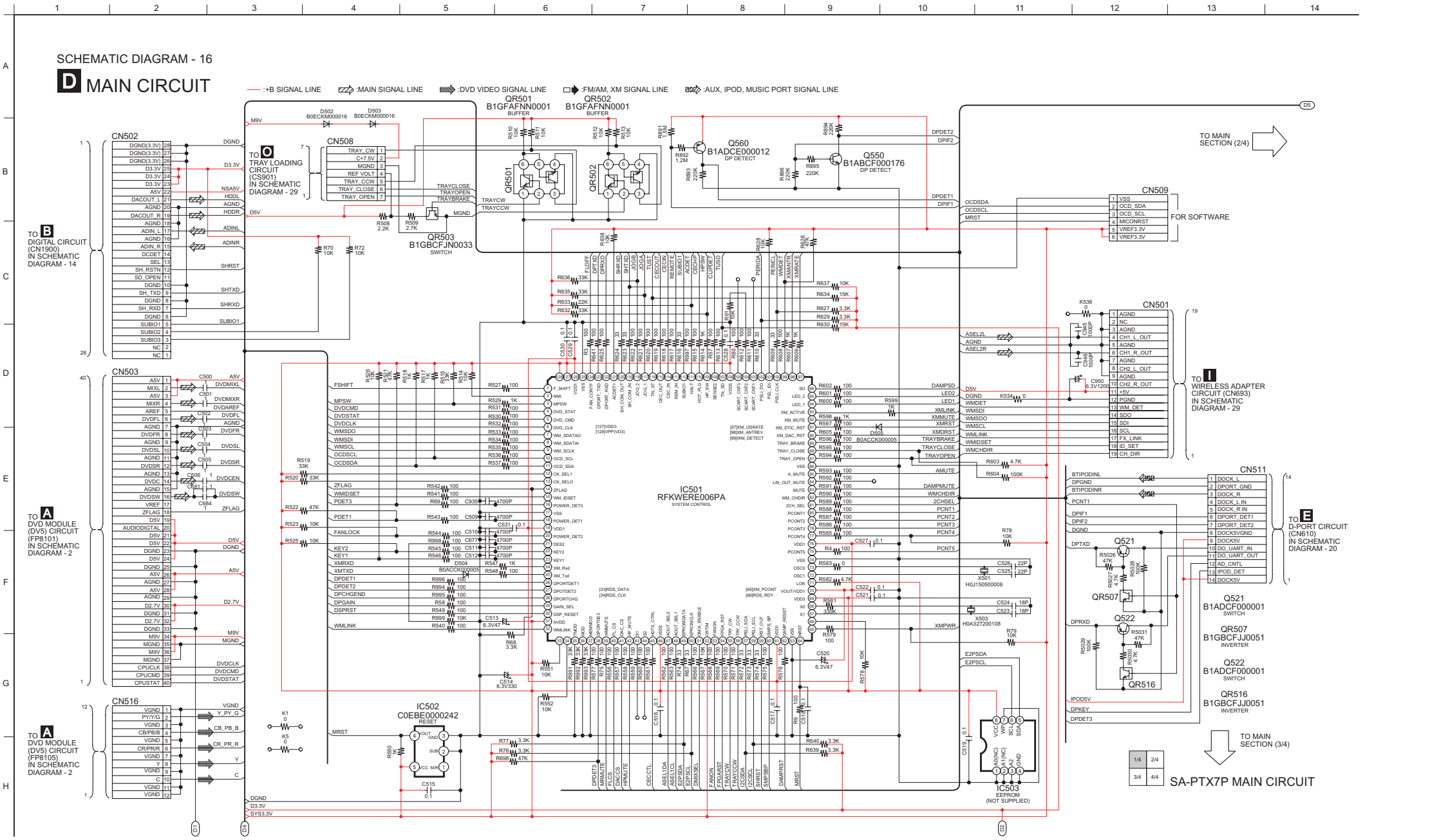
C XM MODULE CIRCUIT

—— :+B SIGNAL LINE ▭▶ :XM SIGNAL LINE



SA-PTX7P XM MODULE CIRCUIT

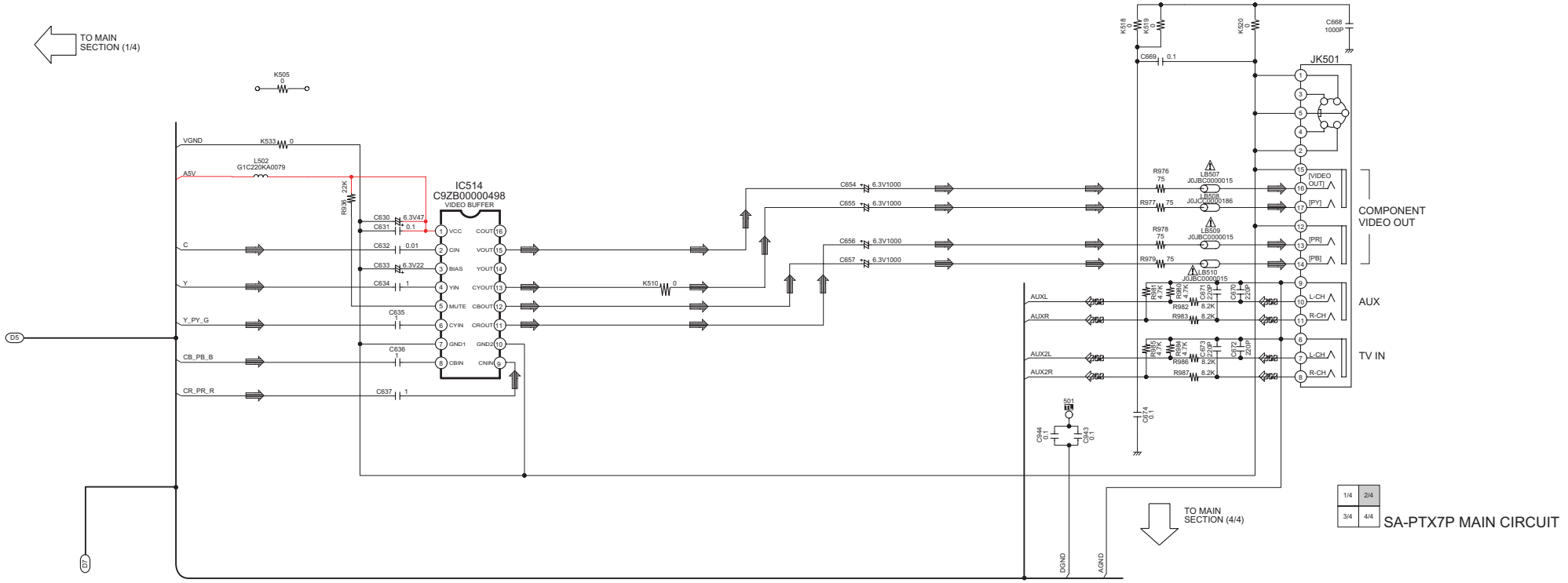
22.3. Main, D-Port & Panel Circuit


SCHEMATIC DIAGRAM - 16
D MAIN CIRCUIT
:+B SIGNAL LINE
:MAIN SIGNAL LINE
:DVD VIDEO SIGNAL LINE
:FM/AM, XM SIGNAL LINE
:AUX, IPOD, MUSIC PORT SIGNAL LINE
QR501 B1GFAFNN0001 BUFFER
QR502 B1GFAFNN0001 BUFFER
QR503 B1GBCFJN0033 SWITCH
Q560 B1ADCE000012 DP DETECT
Q550 B1ABCF000176 DP DETECT
IC501 RFKWERE006PA SYSTEM CONTROL
IC502 C0EBE0000242 RESET
IC503 EEPROM (NOT SUPPLIED)
CN502
CN503
CN508
CN509
CN501
CN511
CN516
TO O TRAY LOADING CIRCUIT (CS901) IN SCHEMATIC DIAGRAM - 29
TO B DIGITAL CIRCUIT (CN1900) IN SCHEMATIC DIAGRAM - 14
TO A DVD MODULE (DV5) CIRCUIT (FP8101) IN SCHEMATIC DIAGRAM - 2
TO A DVD MODULE (DV5) CIRCUIT (FP8105) IN SCHEMATIC DIAGRAM - 2
TO MAIN SECTION (2/4)
FOR SOFTWARE
TO I WIRELESS ADAPTER CIRCUIT (CN693) IN SCHEMATIC DIAGRAM - 29
TO E D-PORT CIRCUIT (CN610) IN SCHEMATIC DIAGRAM - 20
TO MAIN SECTION (3/4)
Q521 B1ADCF000001 SWITCH
QR507 B1GBCFJJ0051 INVERTER
Q522 B1ADCF000001 SWITCH
QR516 B1GBCFJJ0051 INVERTER
SA-PTX7P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 17

D MAIN CIRCUIT

:+B SIGNAL LINE :MAIN SIGNAL LINE :DVD VIDEO SIGNAL LINE :FM/AM, XM SIGNAL LINE :AUX, IPOD, MUSIC PORT SIGNAL LINE



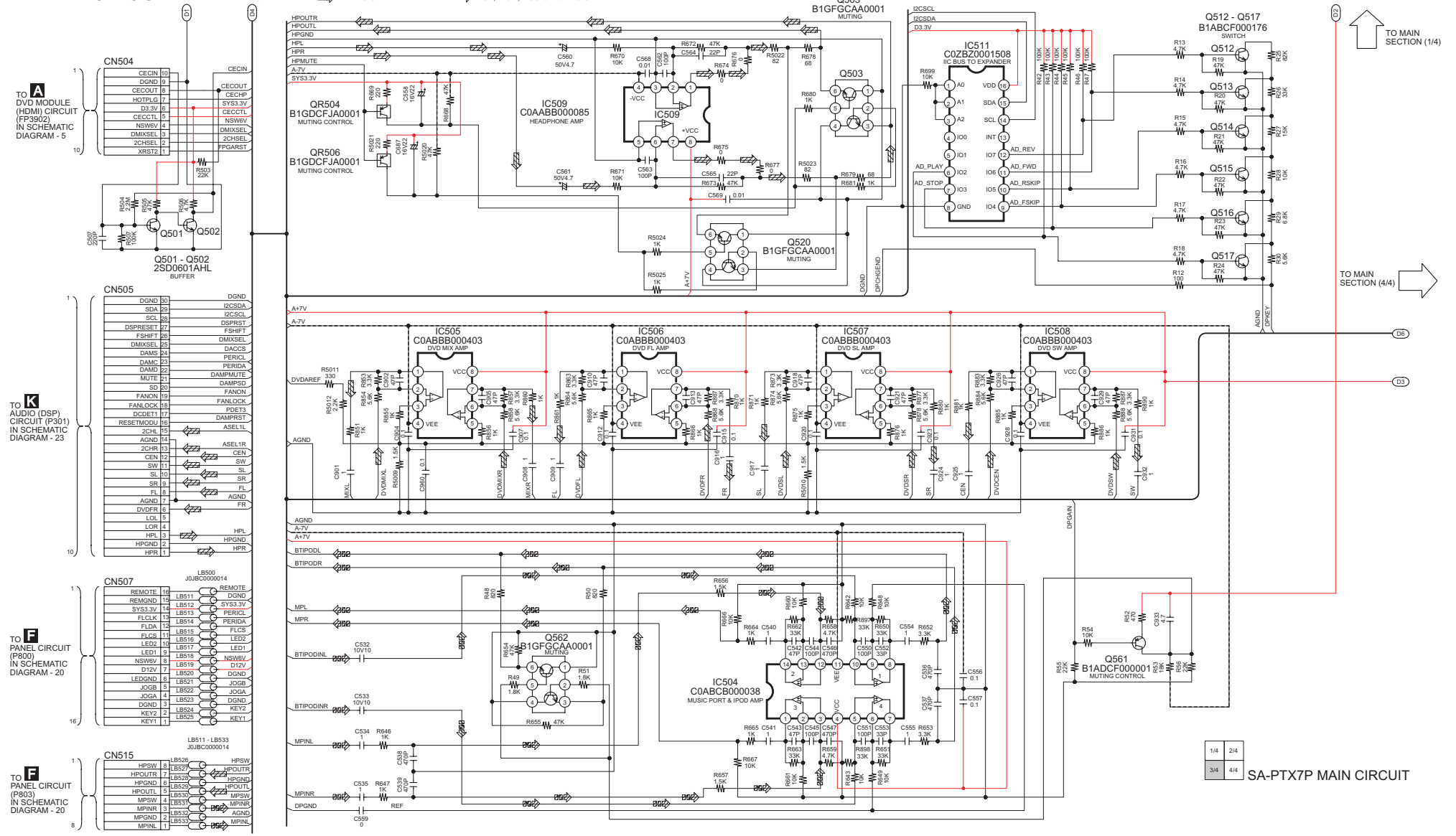
1/4 2/4 3/4 4/4

SA-PTX7P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 18

D MAIN CIRCUIT

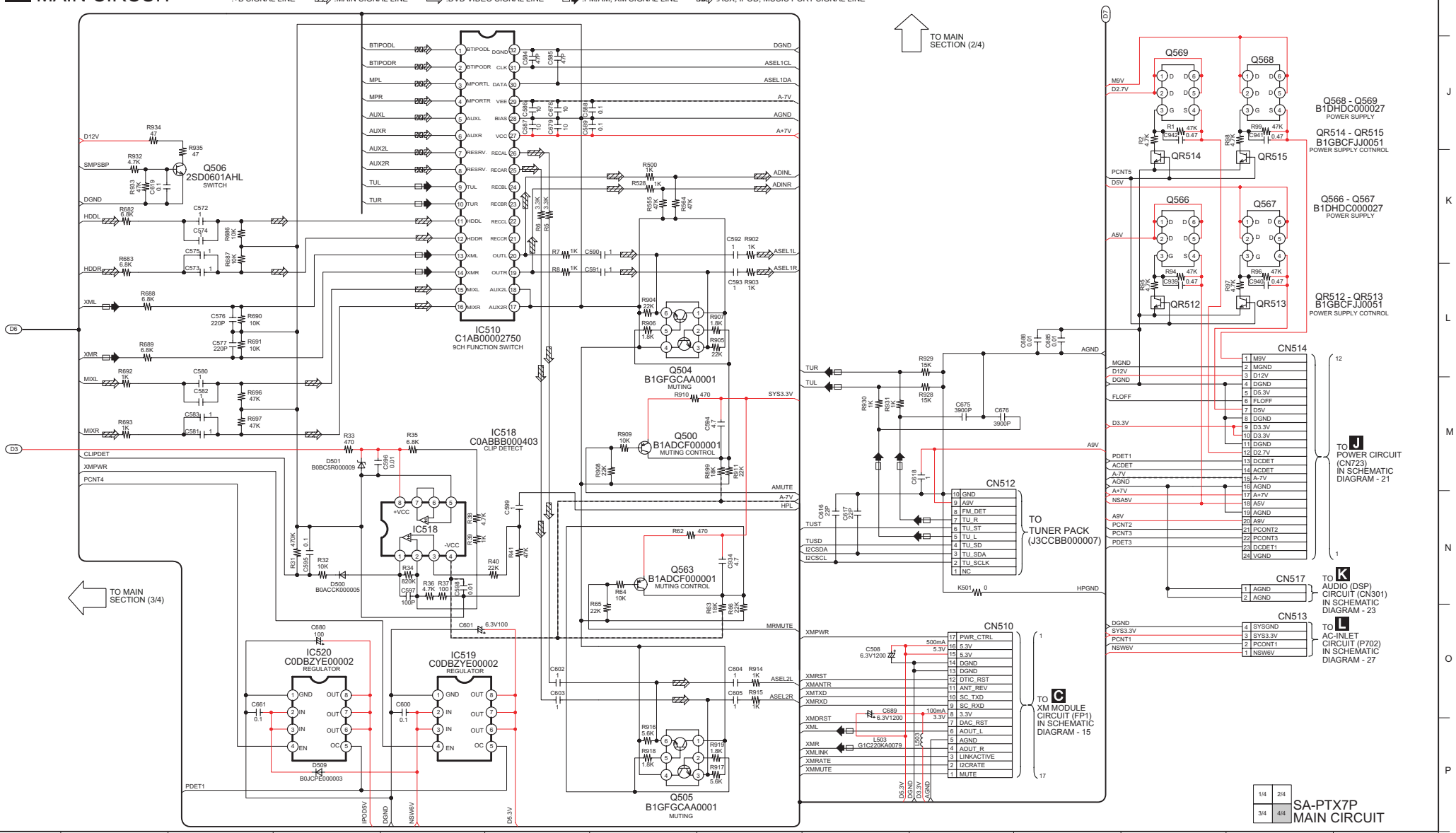
:-B SIGNAL LINE
:+B SIGNAL LINE
:DVD VIDEO SIGNAL LINE
:MAIN SIGNAL LINE
:FM/AM, XM SIGNAL LINE
:AUX, IPOD, MUSIC PORT SIGNAL LINE


TO A DVD MODULE (HDMI) CIRCUIT (FP3902) IN SCHEMATIC DIAGRAM - 5
CN504
Q501 - Q502 2SD0601AHL BUFFER
TO K AUDIO (DSP) CIRCUIT (P301) IN SCHEMATIC DIAGRAM - 23
CN505
TO F PANEL CIRCUIT (P800) IN SCHEMATIC DIAGRAM - 20
CN507
LB500 J0JBC0000014
TO F PANEL CIRCUIT (P803) IN SCHEMATIC DIAGRAM - 20
CN515
LB511 - LB533 J0JBC0000014
QR504 B1GDCFJA0001 MUTING CONTROL
QR506 B1GDCFJA0001 MUTING CONTROL
IC509 C0AABB000085 HEADPHONE AMP
Q503 B1GFGCAA0001 MUTING
Q520 B1GFGCAA0001 MUTING
IC511 C0ZBZ0001508 IIC BUS TO EXPANDER
Q512 - Q517 B1ABCF000176 SWITCH
IC505 C0ABBB000403 DVD MIX AMP
IC506 C0ABBB000403 DVD FL AMP
IC507 C0ABBB000403 DVD SL AMP
IC508 C0ABBB000403 DVD SW AMP
Q562 B1GFGCAA0001 MUTING
IC504 C0ABCB000038 MUSIC PORT & IPOD AMP
Q561 B1ADCF000001 MUTING CONTROL
TO MAIN SECTION (1/4)
TO MAIN SECTION (4/4)
1/4 2/4 3/4 4/4
SA-PTX7P MAIN CIRCUIT

SCHEMATIC DIAGRAM - 19

D MAIN CIRCUIT

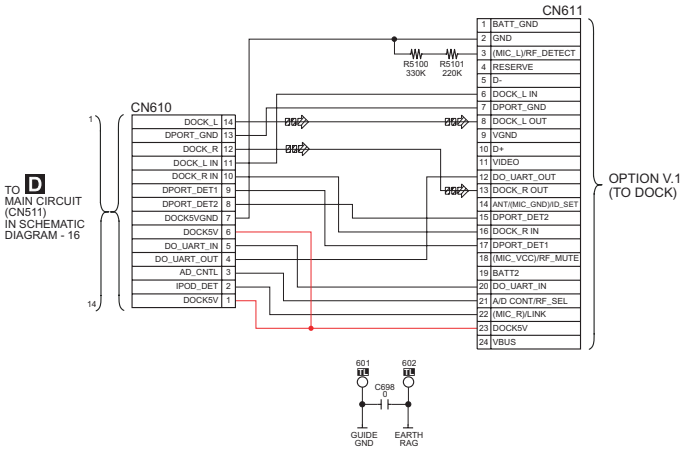
:-B SIGNAL LINE
:+B SIGNAL LINE
:MAIN SIGNAL LINE
:DVD VIDEO SIGNAL LINE
:FM/AM, XM SIGNAL LINE
:AUX, IPOD, MUSIC PORT SIGNAL LINE



SCHEMATIC DIAGRAM - 20

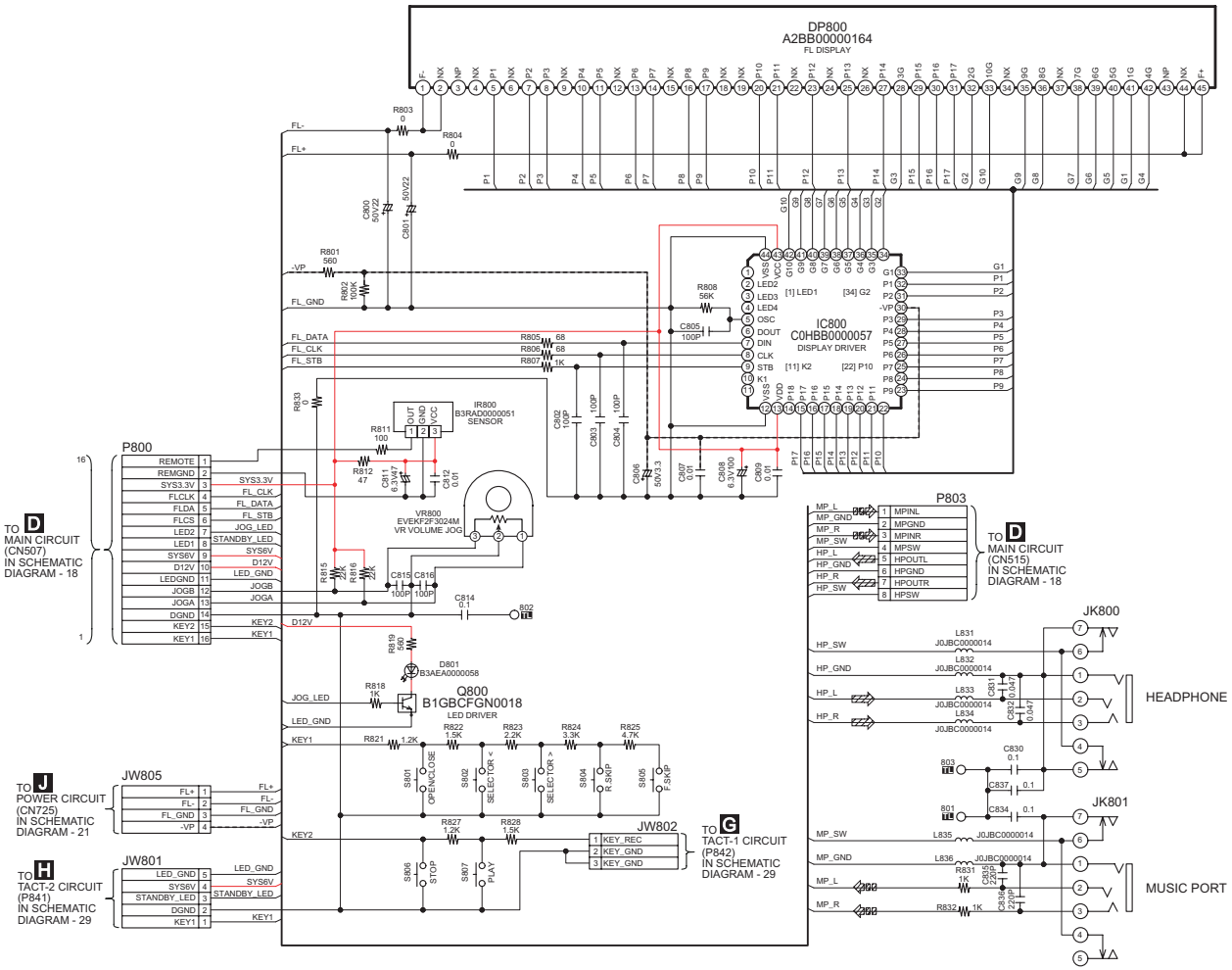
E D-PORT CIRCUIT

:+B SIGNAL LINE :IPOD SIGNAL LINE



F PANEL CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE : MAIN SIGNAL LINE : MUSIC PORT SIGNAL LINE



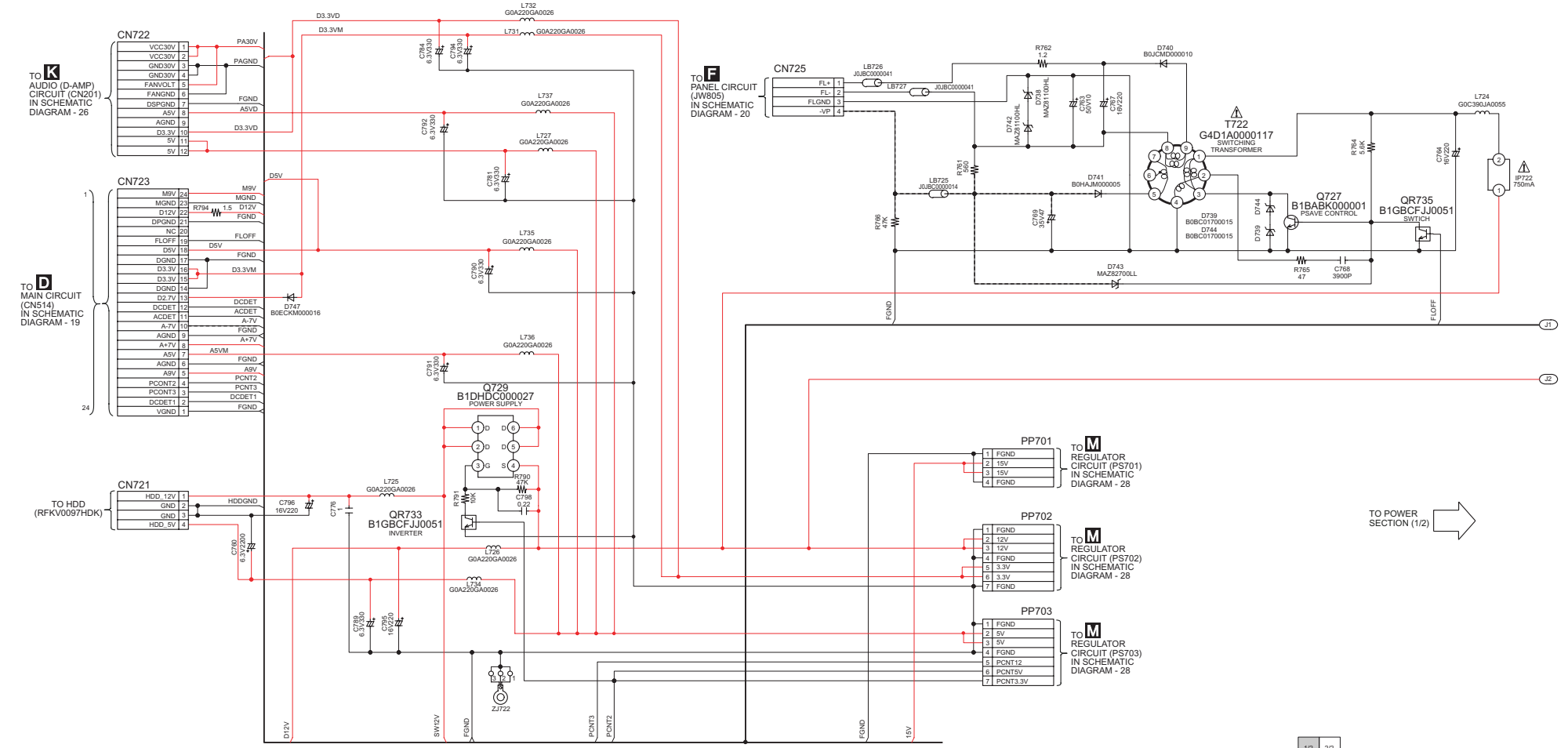
SA-PTX7P D-PORT / PANEL CIRCUIT

22.4. Power, Audio (DSP/D-Amp), AC-Inlet & Regulator Circuit

SCHEMATIC DIAGRAM - 21

J POWER CIRCUIT

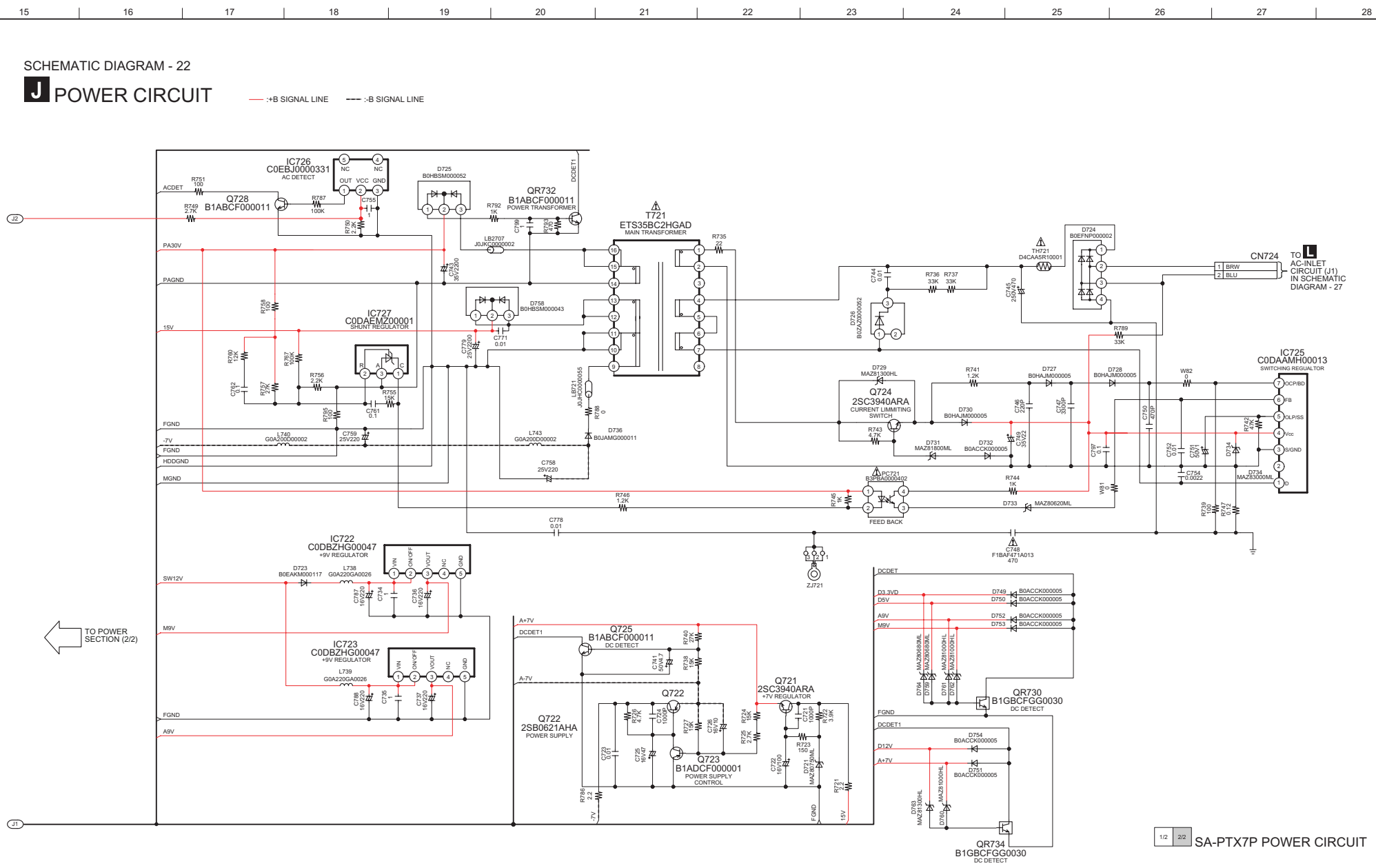
—— :+B SIGNAL LINE - - - :-B SIGNAL LINE



SCHEMATIC DIAGRAM - 22

J POWER CIRCUIT

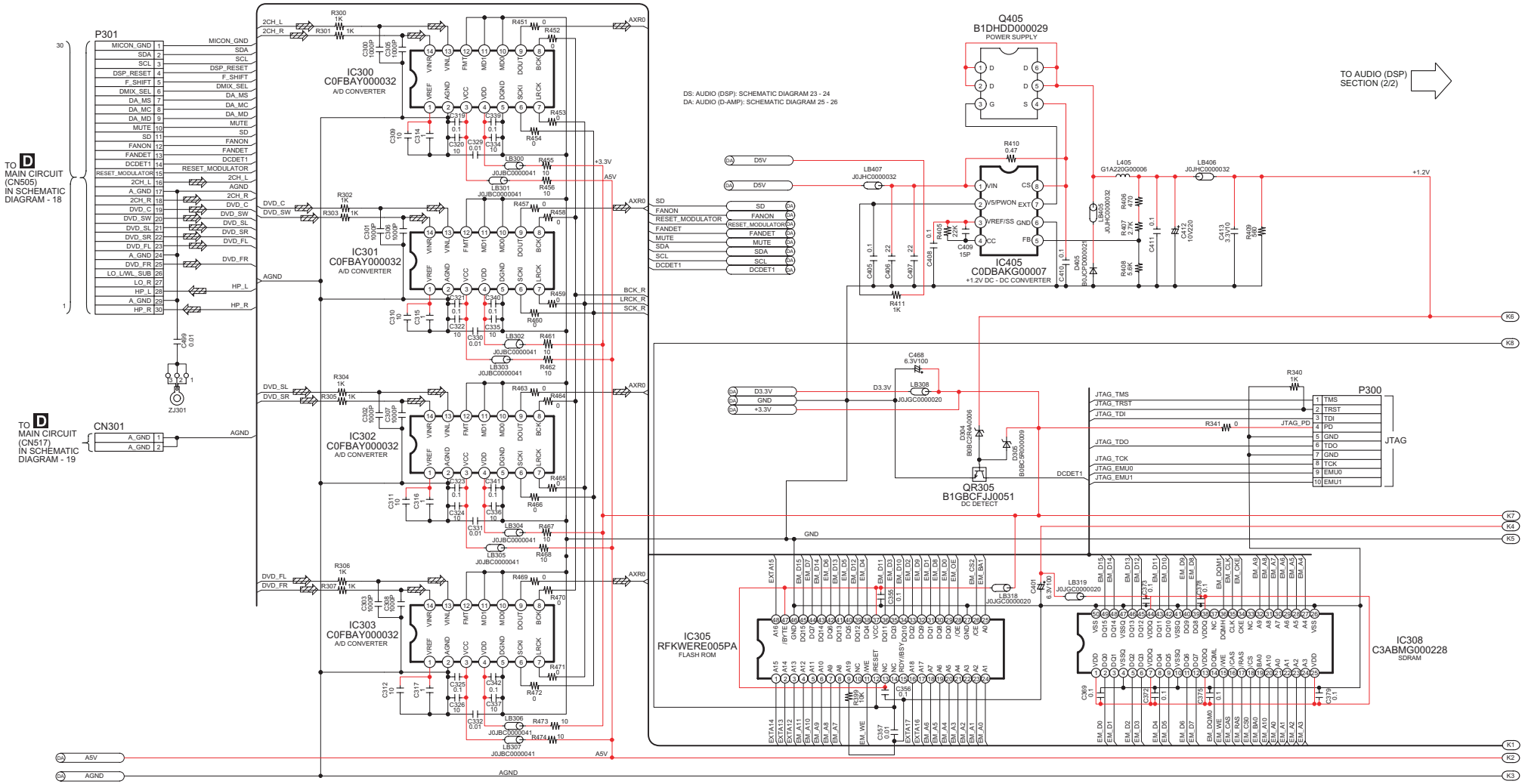
:+B SIGNAL LINE :-B SIGNAL LINE



SCHEMATIC DIAGRAM - 23

K AUDIO (DSP) CIRCUIT

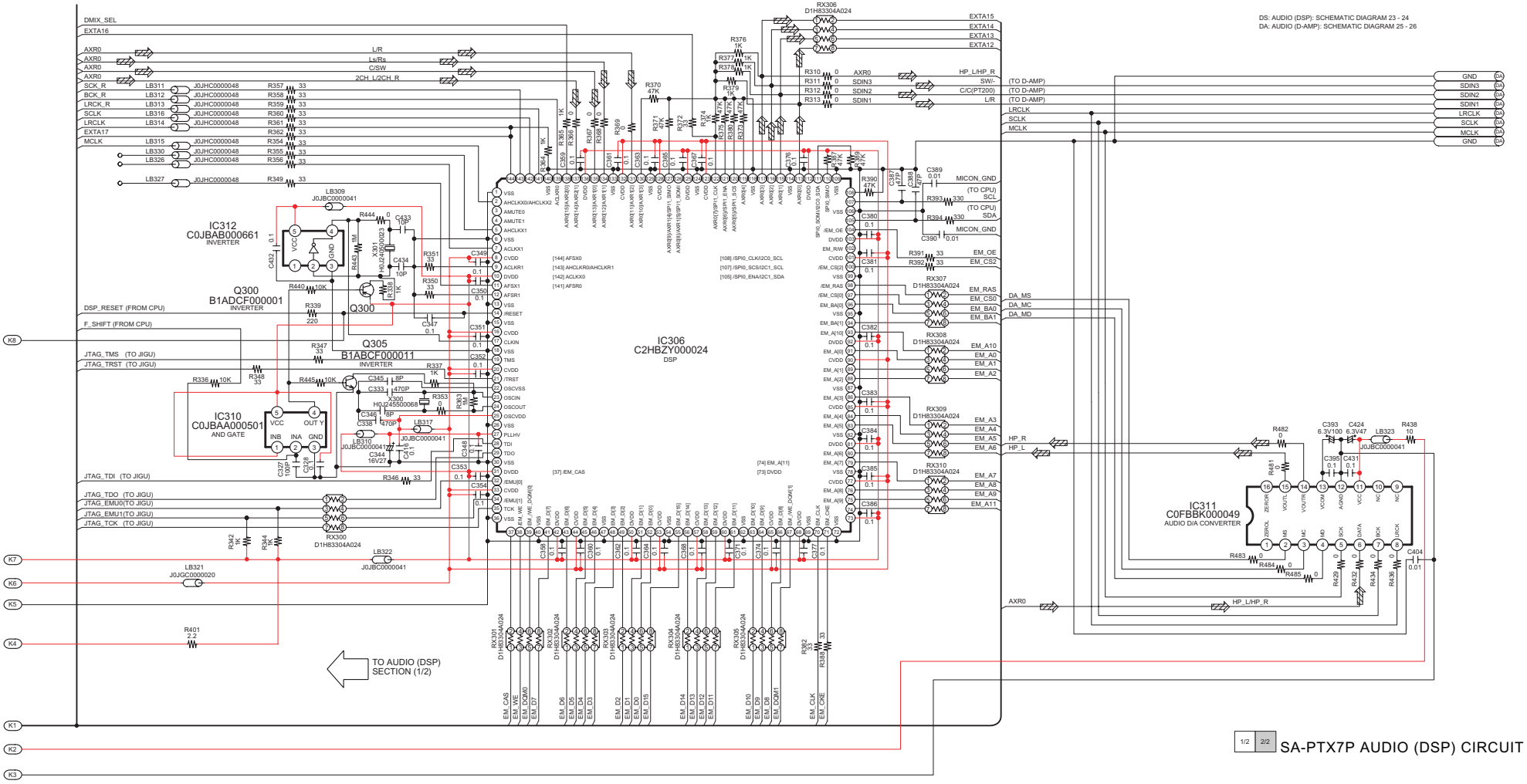
:+B SIGNAL LINE :MAIN SIGNAL LINE


P301
TO D MAIN CIRCUIT (CN505) IN SCHEMATIC DIAGRAM - 18
CN301
TO D MAIN CIRCUIT (CN517) IN SCHEMATIC DIAGRAM - 19
ZJ301
IC300 C0FBAY000032 A/D CONVERTER
IC301 C0FBAY000032 A/D CONVERTER
IC302 C0FBAY000032 A/D CONVERTER
IC303 C0FBAY000032 A/D CONVERTER
DS: AUDIO (DSP): SCHEMATIC DIAGRAM 23 - 24
DA: AUDIO (D-AMP): SCHEMATIC DIAGRAM 25 - 26
Q405 B1DHDD000029 POWER SUPPLY
IC405 C0DBAKG00007 +1.2V DC - DC CONVERTER
QR305 B1GBCFJJ0051 DC DETECT
IC305 RFKWERE005PA FLASH ROM
IC308 C3ABMG000228 SDRAM
P300 JTAG
TO AUDIO (DSP) SECTION (2/2)
1/2 2/2 SA-PTX7P AUDIO (DSP) CIRCUIT

SCHEMATIC DIAGRAM - 24

K AUDIO (DSP) CIRCUIT

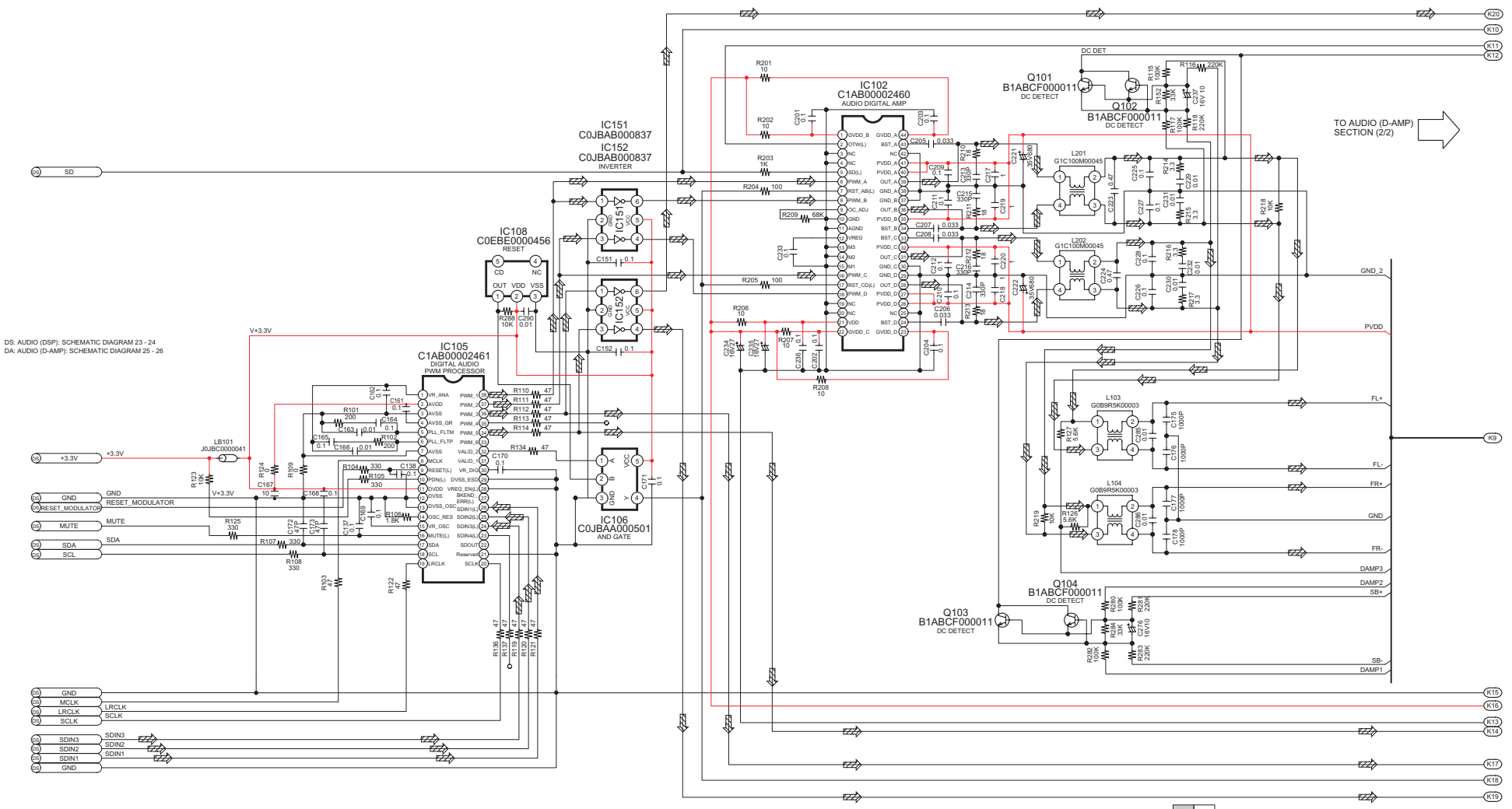
—— :+B SIGNAL LINE



SCHEMATIC DIAGRAM - 25

K AUDIO (D-AMP) CIRCUIT

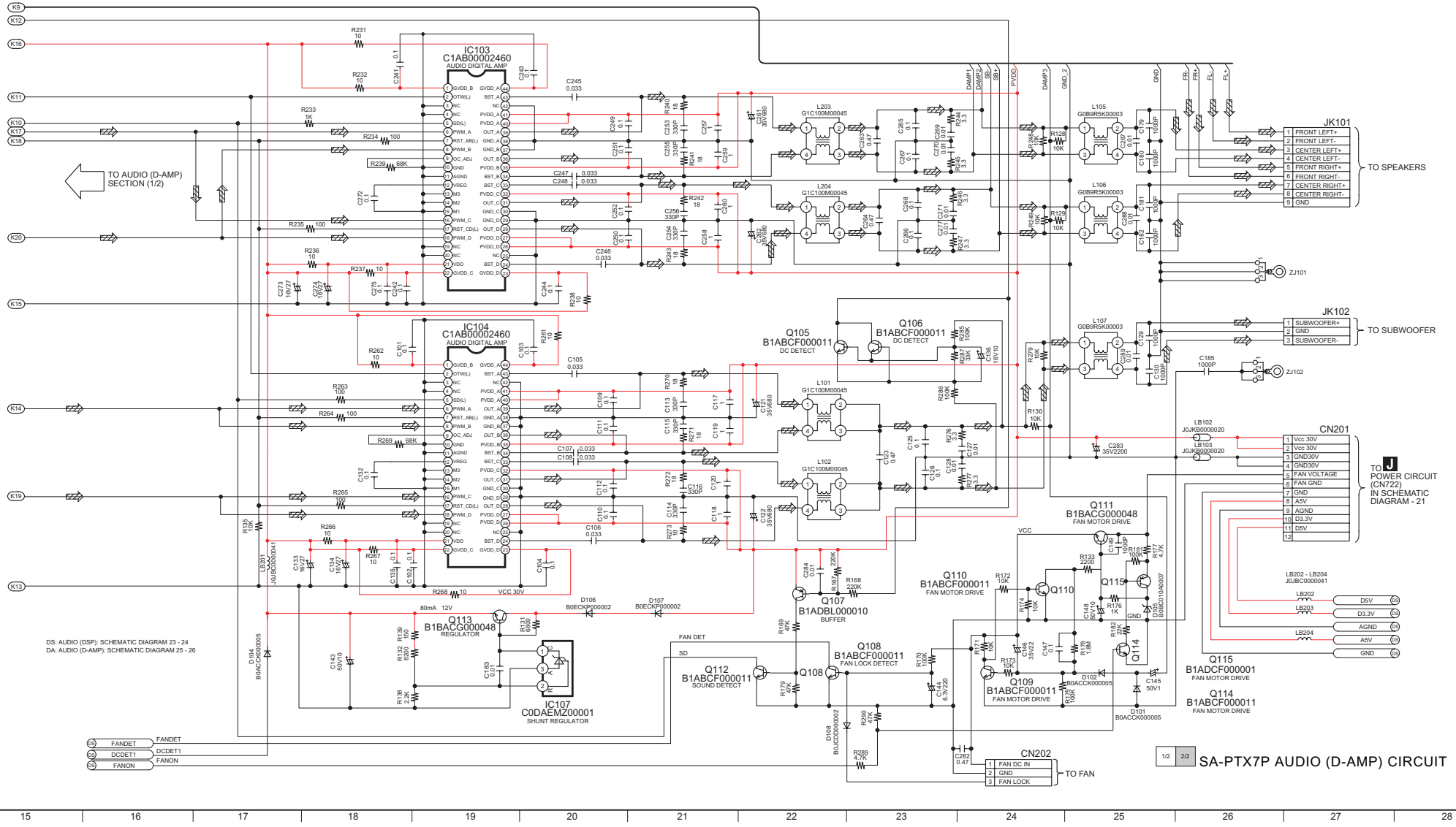
—— :+B SIGNAL LINE :MAIN SIGNAL LINE



SCHEMATIC DIAGRAM - 26

K AUDIO (D-AMP) CIRCUIT

—— :+B SIGNAL LINE :MAIN SIGNAL LINE

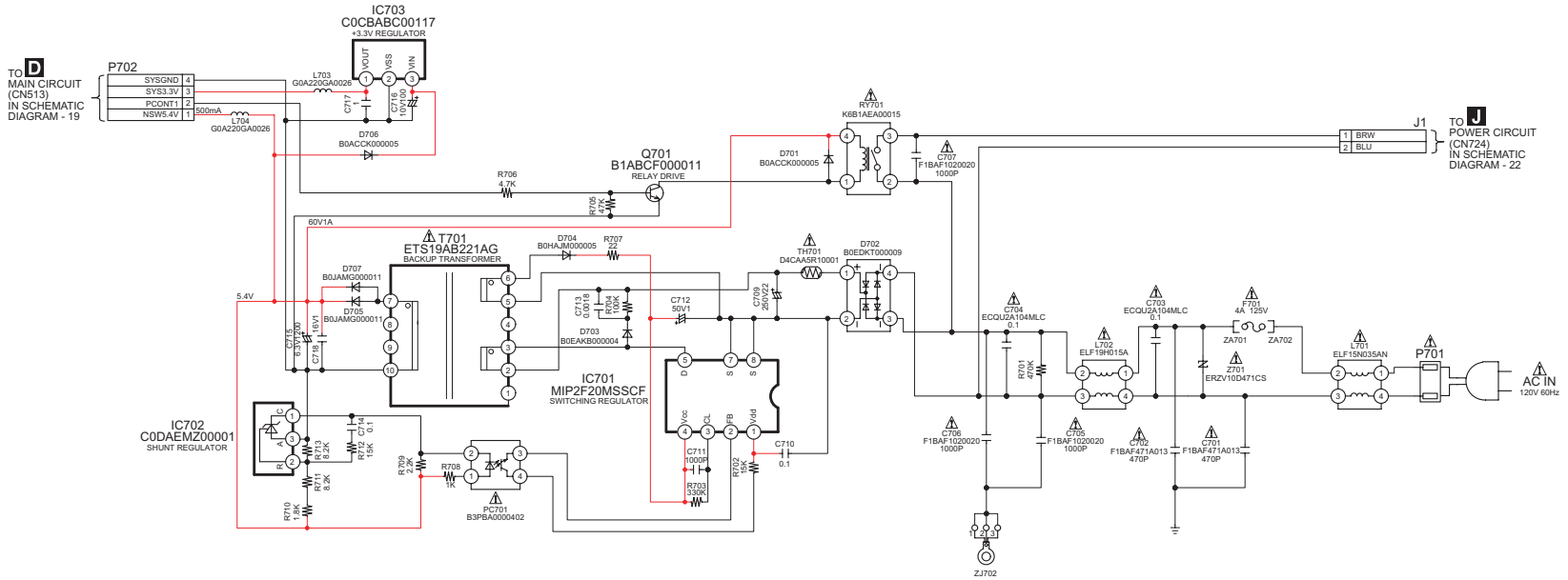


1/2 2/2 SA-PTX7P AUDIO (D-AMP) CIRCUIT

SCHEMATIC DIAGRAM - 27

L AC-INLET CIRCUIT

—— :+B SIGNAL LINE

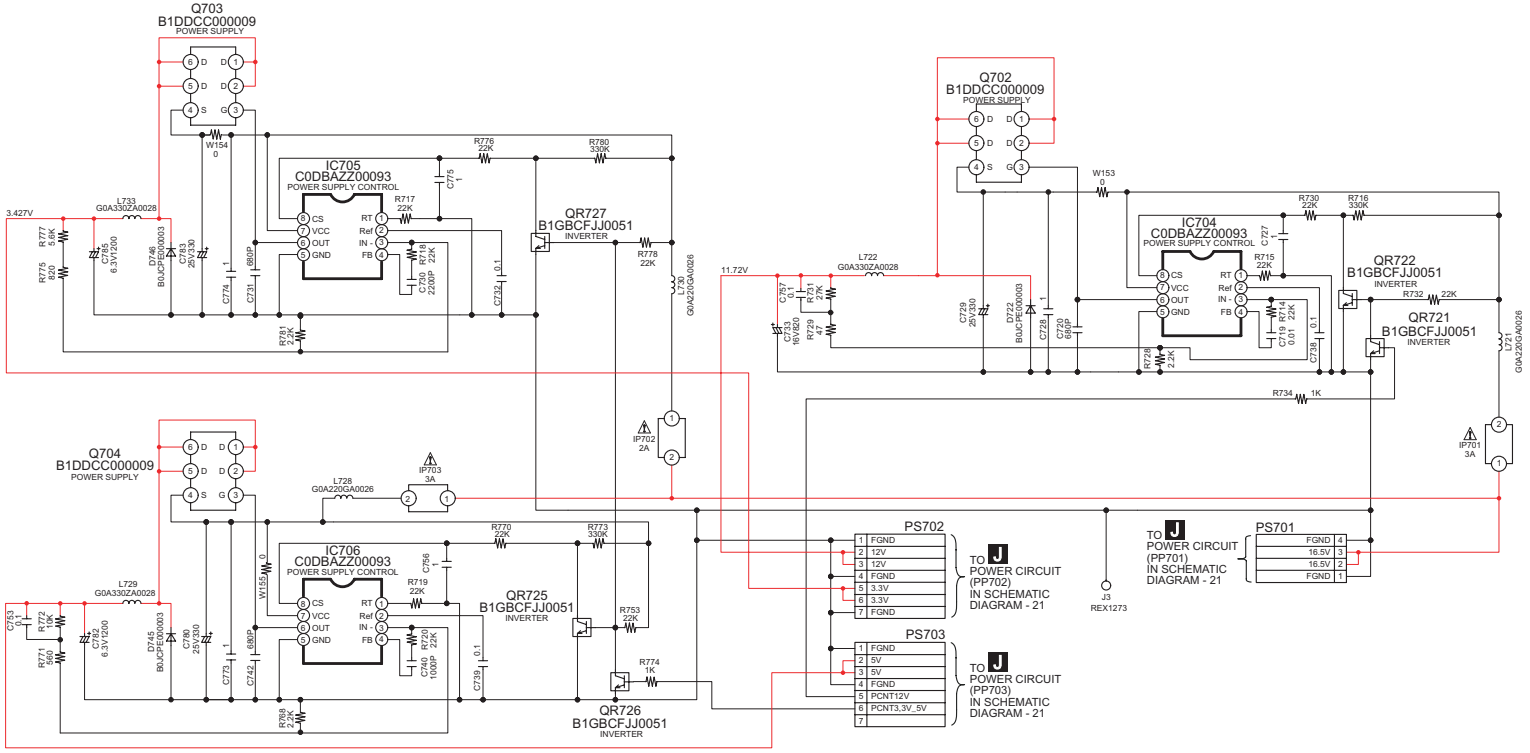


SA-PTX7P AC-INLET CIRCUIT

SCHEMATIC DIAGRAM - 28

M REGULATOR CIRCUIT

:+B SIGNAL LINE

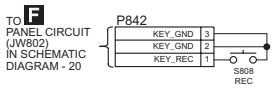


SA-PTX7P REGULATOR CIRCUIT

22.5. Tact-1, Tact-2, Wireless Adapter, Relay, Tray Loading & Optical Pickup Unit Circuit

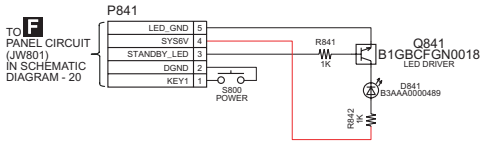
SCHEMATIC DIAGRAM - 29

G TACT-1 CIRCUIT



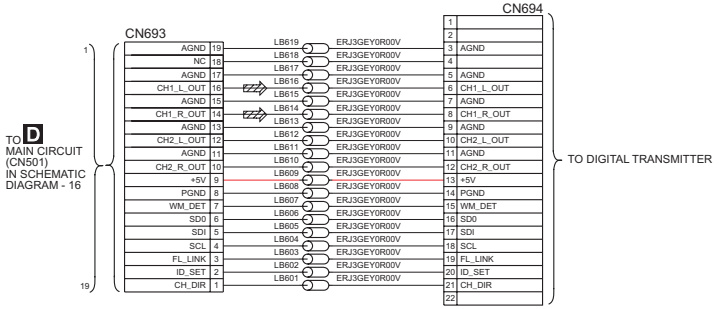
H TACT-2 CIRCUIT

:+B SIGNAL LINE



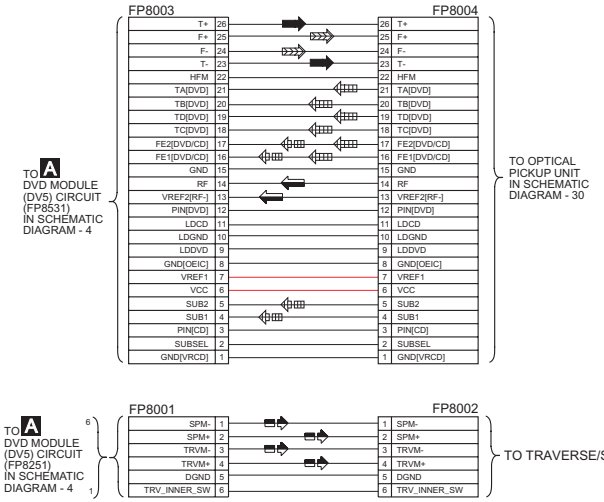
I WIRELESS ADAPTER CIRCUIT

:+B SIGNAL LINE :MAIN SIGNAL LINE



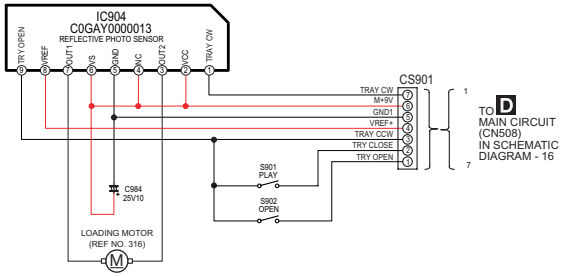
N RELAY CIRCUIT

: FOCUS ERROR SIGNAL LINE : DVD RF SIGNAL LINE : CD HEAD SIGNAL LINE
:+B SIGNAL LINE : TRACKING ERROR SIGNAL LINE : MOTOR DRIVE SIGNAL LINE : DVD HEAD SIGNAL LINE



O TRAY LOADING CIRCUIT

:+B SIGNAL LINE

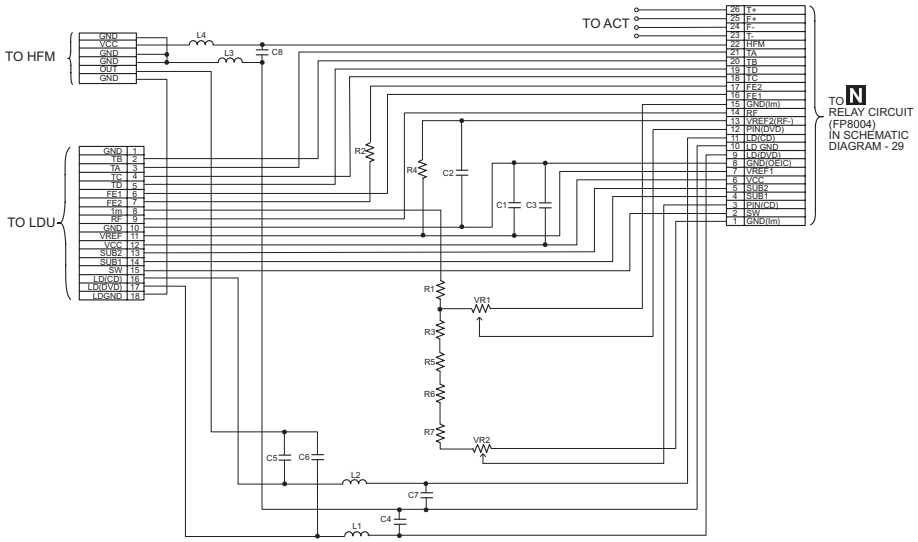


SA-PTX7P TACT-1 / TACT-2 / WIRELESS ADAPTER / RELAY / TRAY LOADING CIRCUIT

SCHEMATIC DIAGRAM - 30

OPTICAL PICKUP UNIT CIRCUIT

(FOR REFERENCE ONLY)

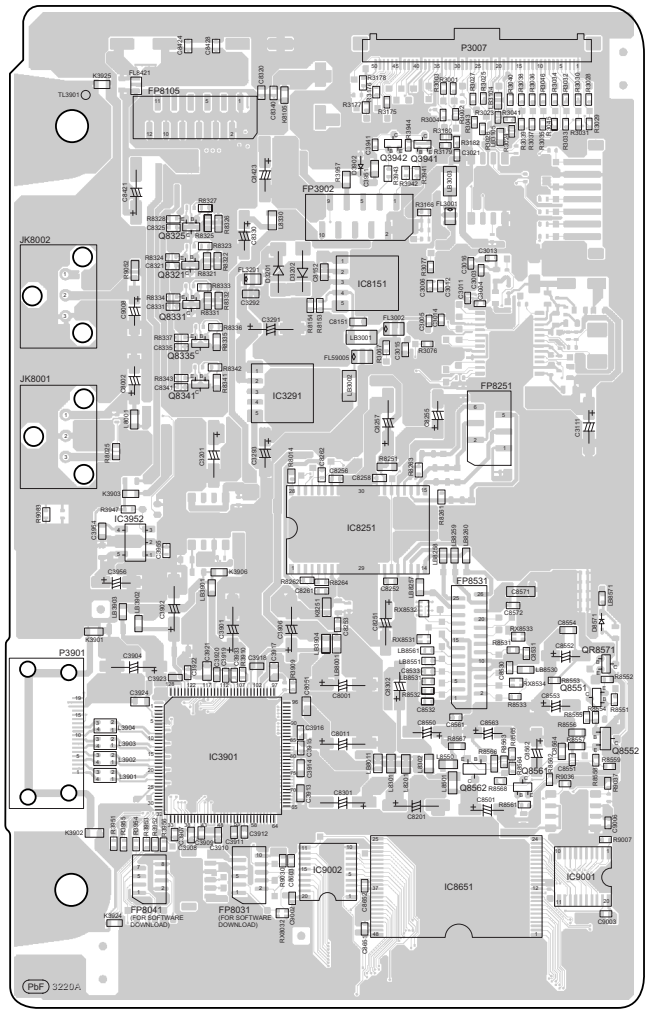


SA-PTX7P OPTICAL PICKUP UNIT CIRCUIT

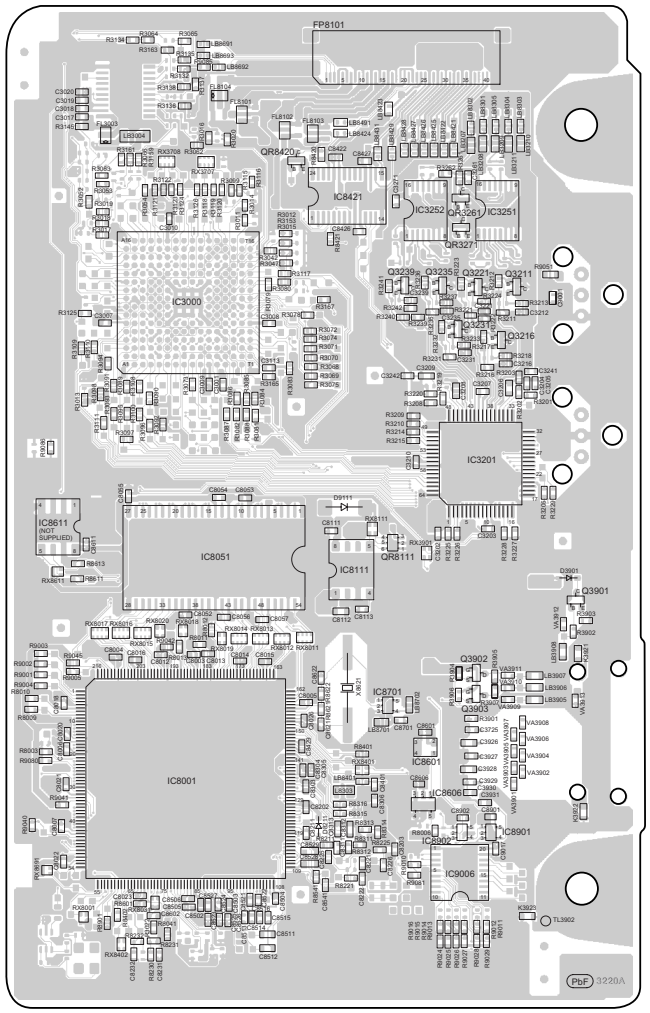
23 Printed Circuit Board

23.1. DVD Module P.C.B.

A DVD MODULE P.C.B. (REP4235A)



(SIDE A)

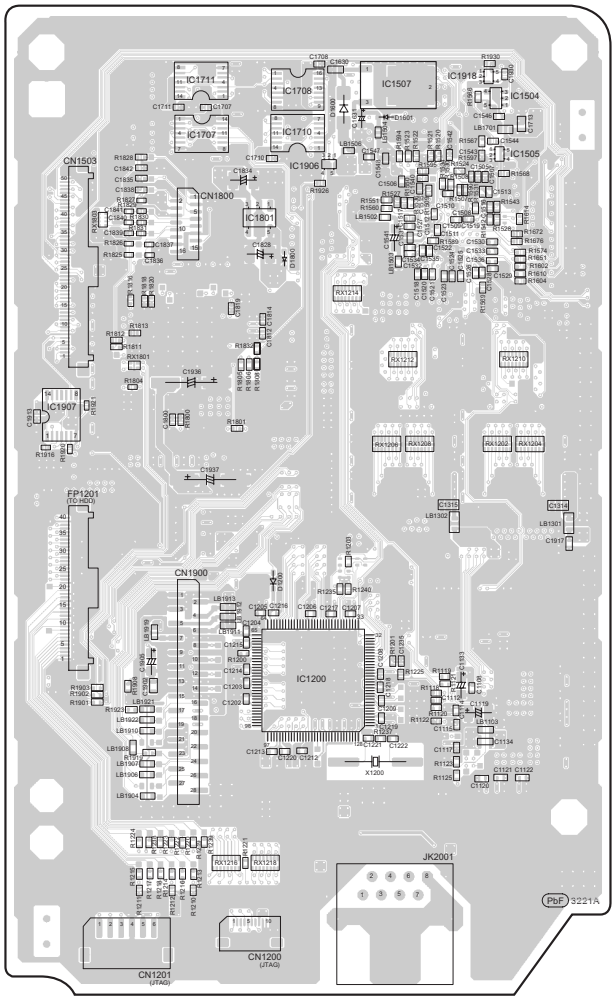


(SIDE B)

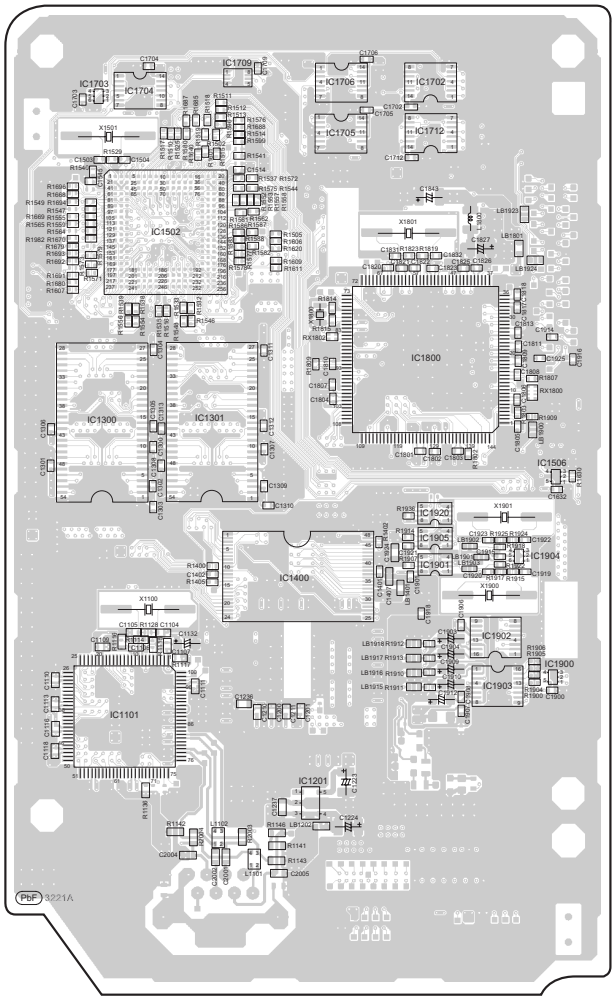
SA-PTX7P
DVD MODULE P.C.B.

23.2. Digital P.C.B.

B DIGITAL P.C.B. (REP4236A)



(SIDE A)

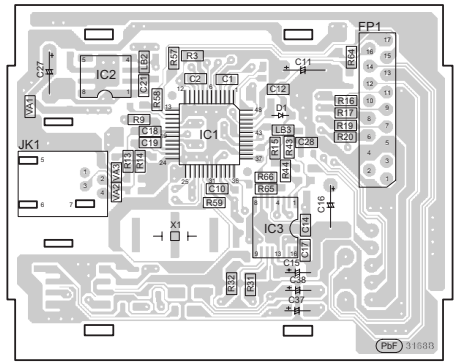


(SIDE B)

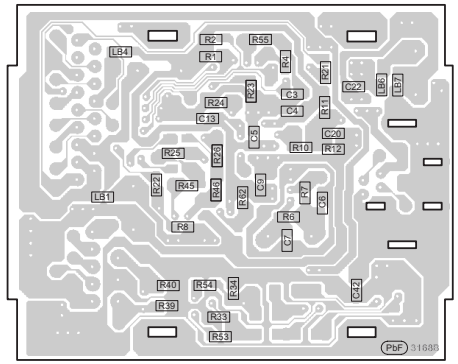
SA-PTX7P
DIGITAL P.C.B.

23.3. XM, D-Port, Tact-1 & Tact -2 P.C.B.

C XM MODULE P.C.B. (REPX0590A)

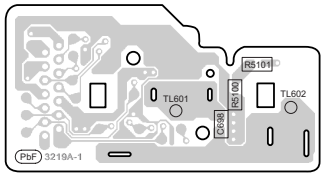


(SIDE A)

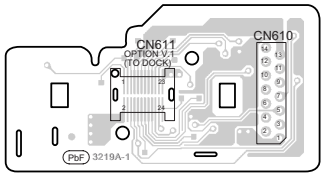


(SIDE B)

E D-PORT P.C.B. (REP4234A)

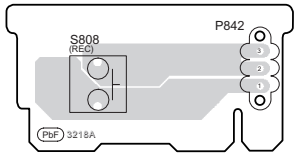


(SIDE A)

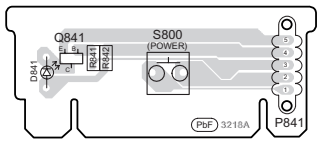


(SIDE B)

G TACT-1 P.C.B. (REP4233A)



H TACT-2 P.C.B. (REP4233A)

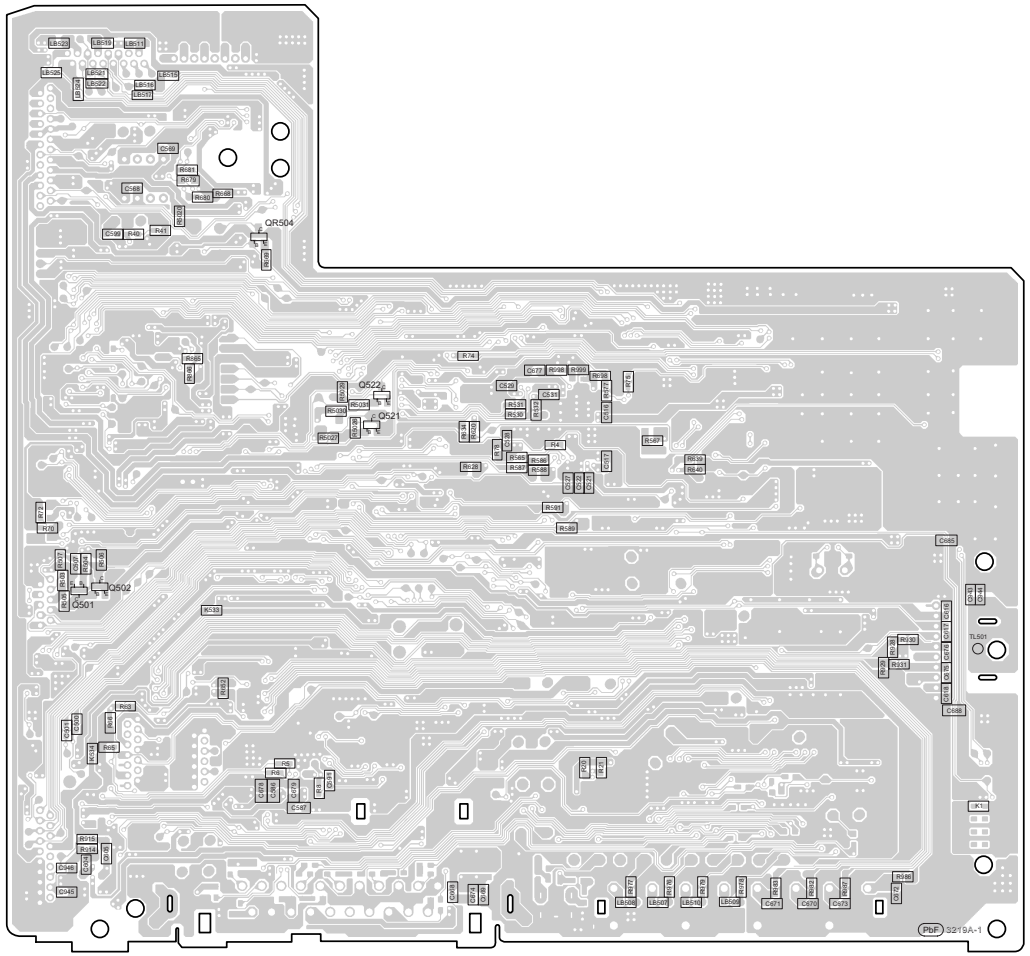


SA-PTX7P
XM/D-PORT/TACT-1/TACT-2 P.C.B.

23.4. Main P.C.B.

23.4.1. Side A of Main P.C.B.

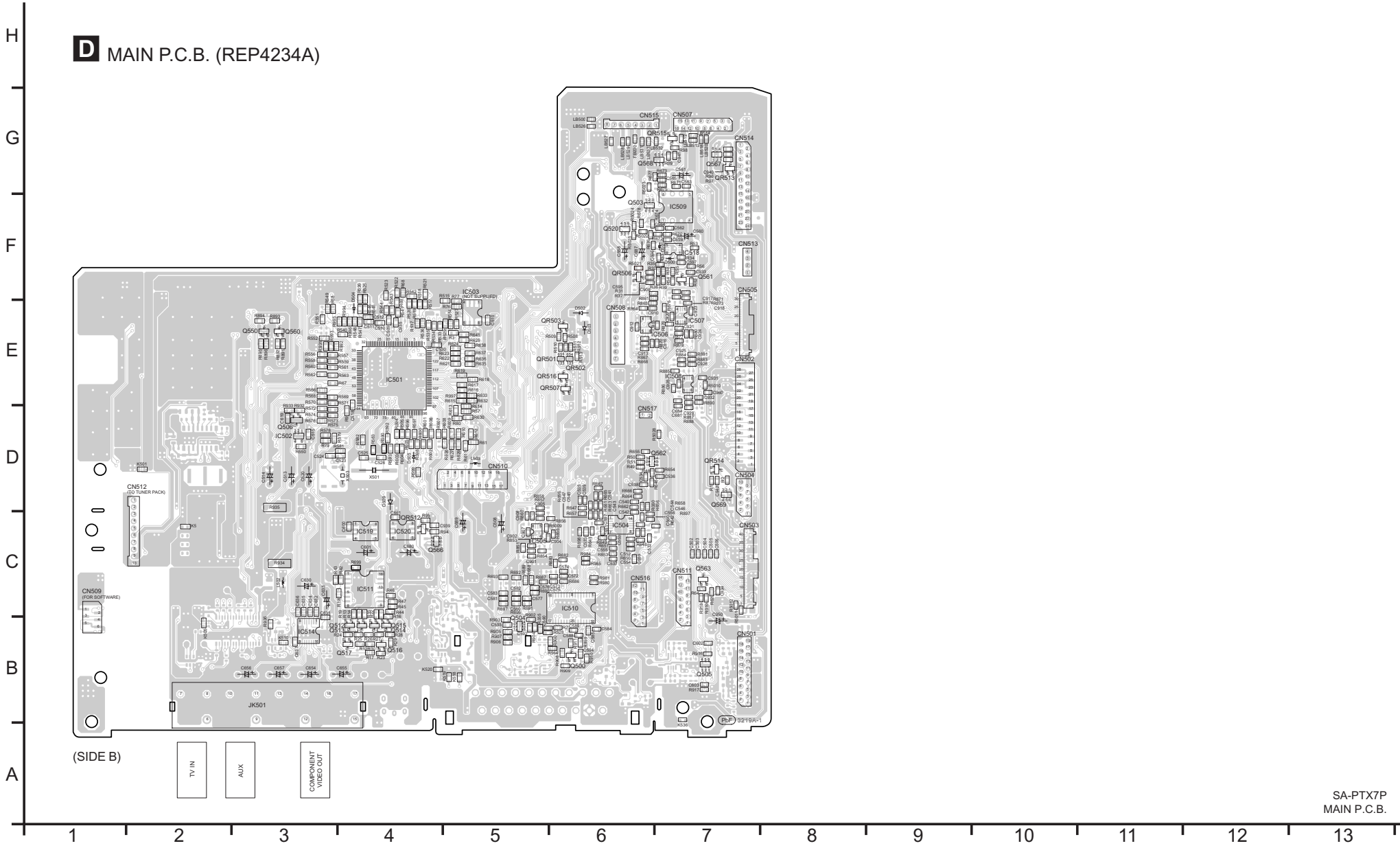
D MAIN P.C.B. (REP4234A)



(SIDE A)

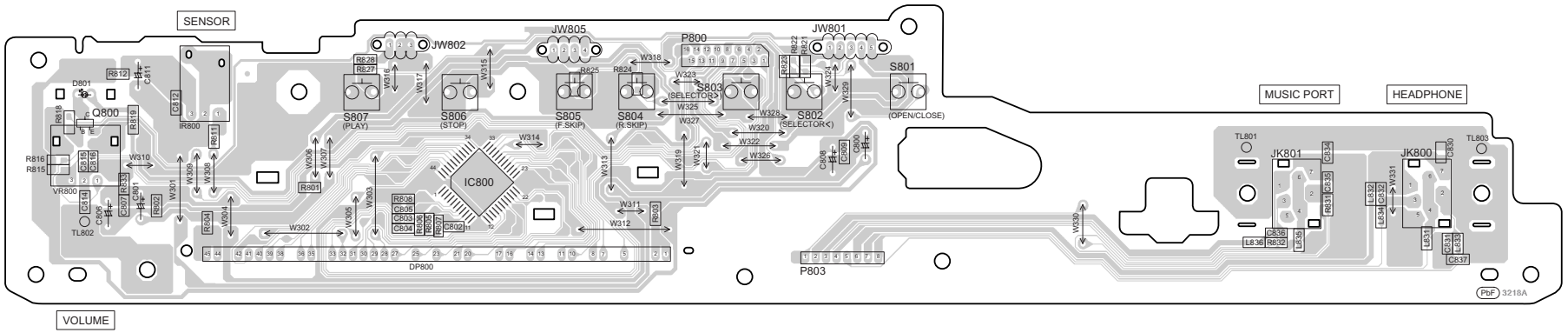
SA-PTX7P
MAIN P.C.B.

23.4.2. Side B of Main P.C.B.

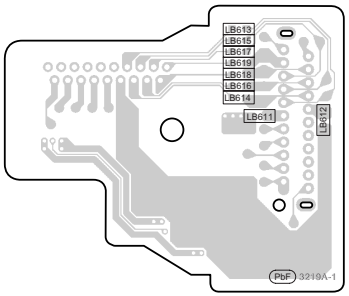


23.5. Panel & Wireless Adapter P.C.B.

F PANEL P.C.B. (REP4233A)

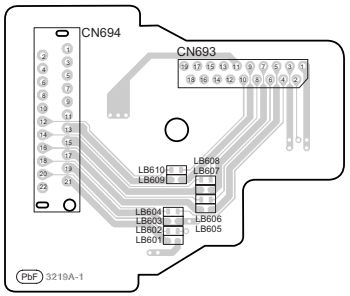


I WIRELESS ADAPTER P.C.B. (REP4234A)



(SIDE A)

DIGITAL TRANSMITTER

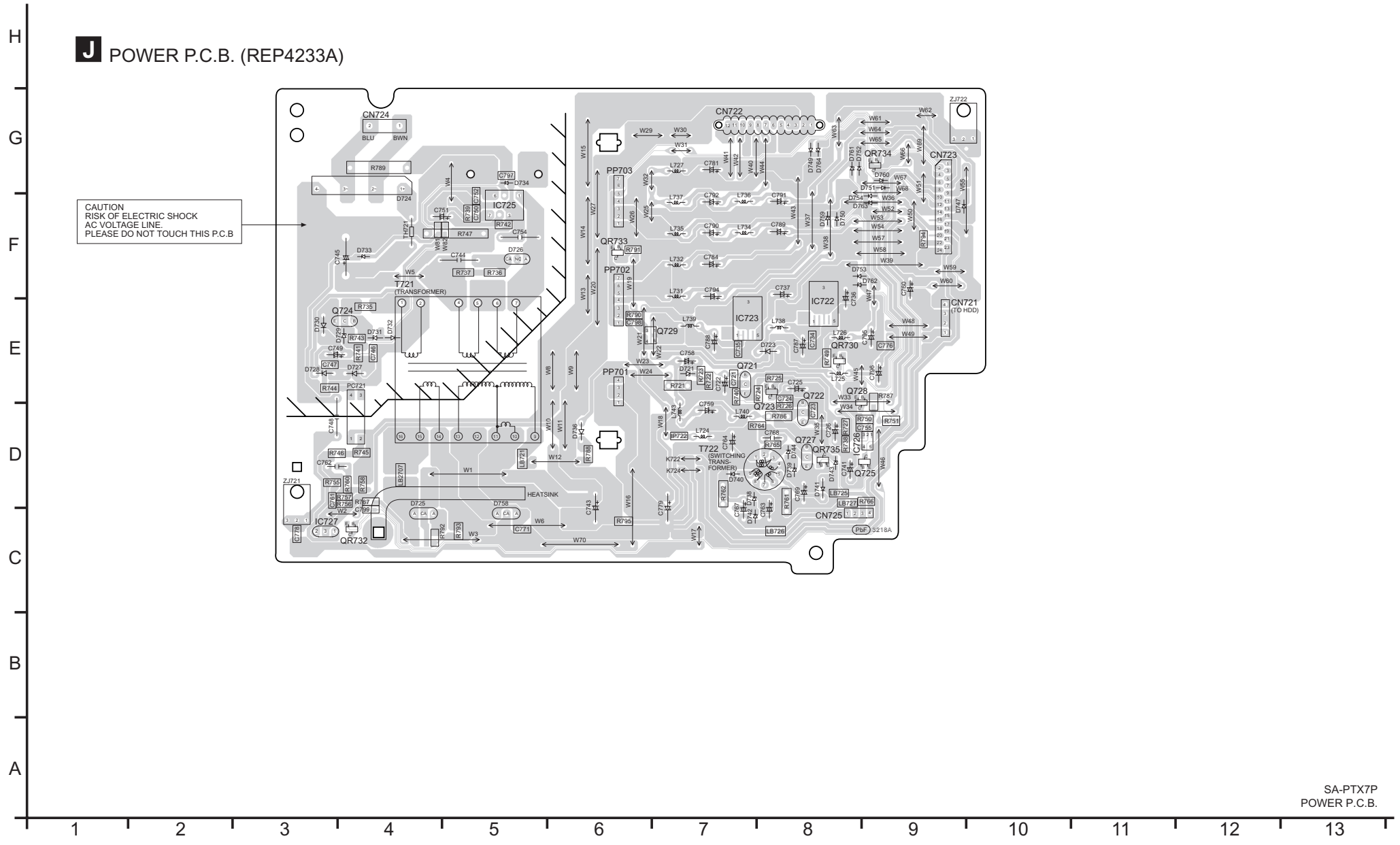


(SIDE B)

SA-PTX7P
PANEL/WIRELESS ADAPTER P.C.B.

23.6. Power P.C.B.

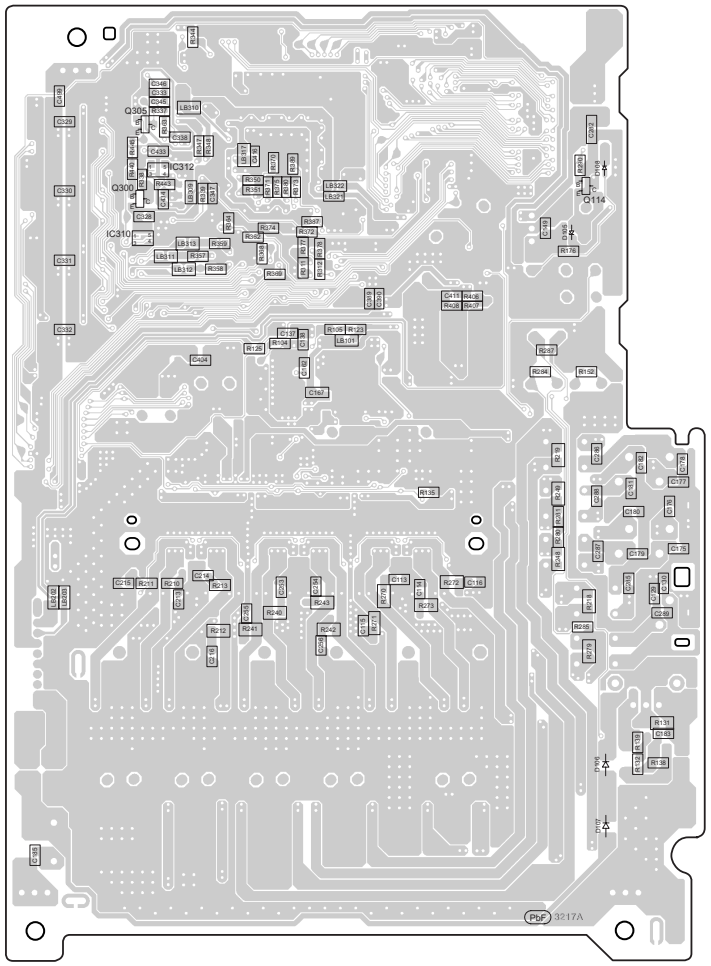
J POWER P.C.B. (REP4233A)



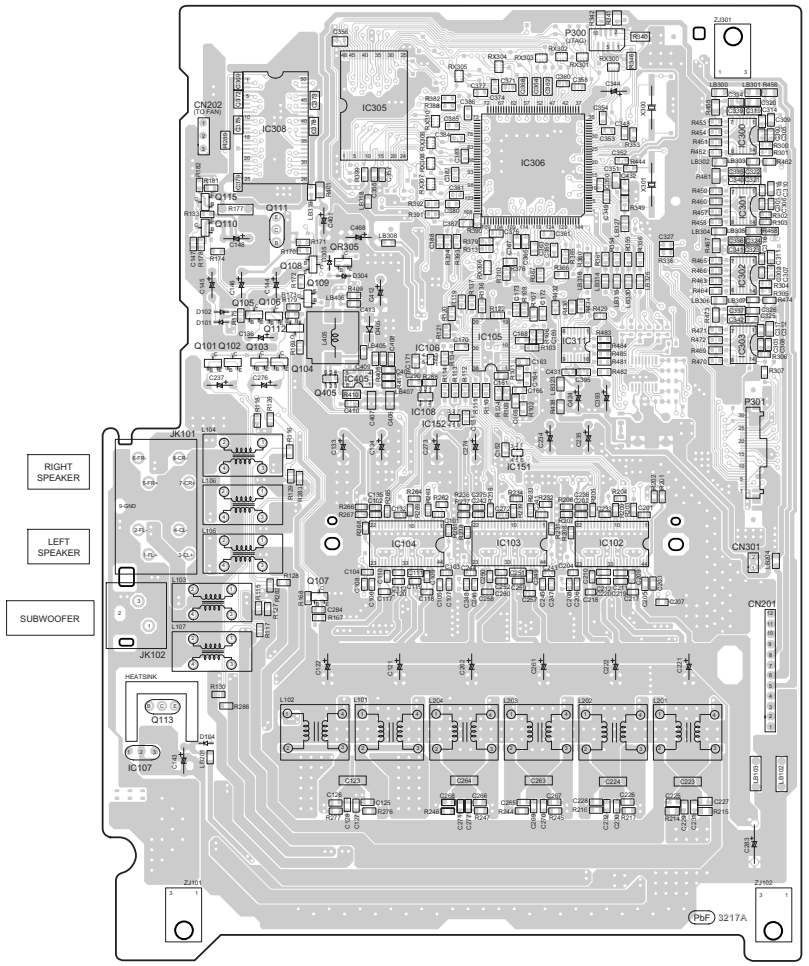
SA-PTX7P
POWER P.C.B.

23.7. Audio (D-Amp/DSP) P.C.B.

K AUDIO P.C.B. (REP4232A)



(SIDE A)

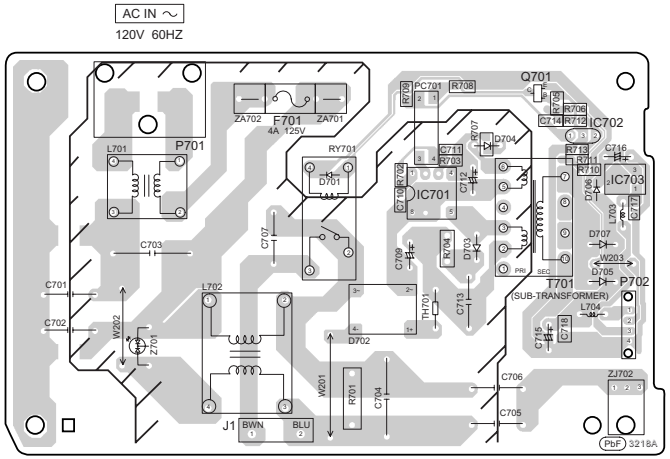


(SIDE B)

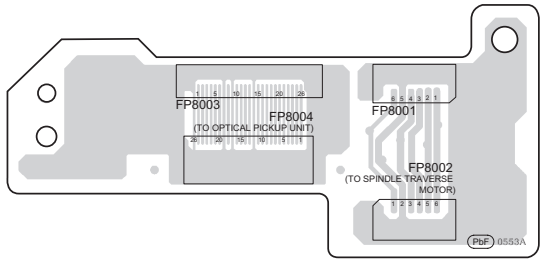
SA-PTX7P
AUDIO P.C.B.

23.8. AC-Inlet, Regulator, Relay & Tray Loading P.C.B.

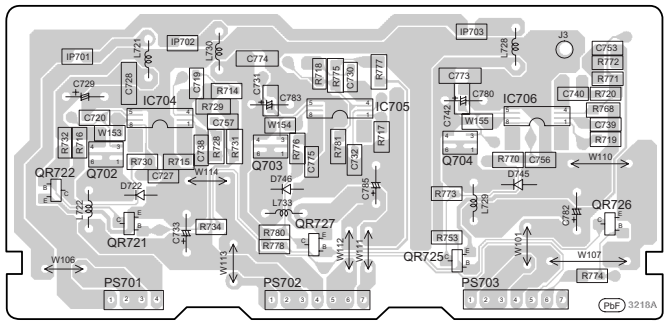
L AC-INLET P.C.B. (REP4233A)



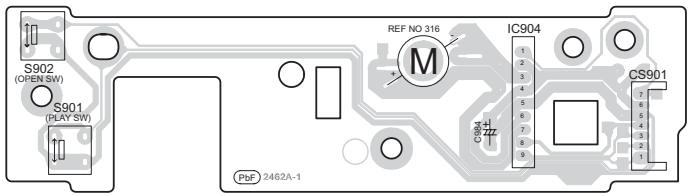
N RELAY P.C.B. (REPX0604A)



M REGULATOR P.C.B. (REP4233A)



O TRAY LOADING P.C.B. (REP4238A)



SA-PTX7P
AC-INLET/REGULATOR/RELAY/TRAY LOADING P.C.B.

24 Basic Troubleshooting Guide

24.1. Before Repairing

[CAUTION] This system included HDD (Hardisk), be careful during handling, vibration, impact to HDD during shipment.

24.2. Precaution of Replacement of HDD (Hardisk)

This system included HDD(Hardisk), when replace HDD, must process [HDD format], [CD title information], and [set unit programe]. Then update system software.

After format and Initialization setting, data in HDD will be lost.

Handling of HDD
When replacing HDD, please make the rear jumper slave or cable select configuration

The following precautiions should be taken when handling HDD.

1. Never give an impact to HDD. (Even a drop from 1cm height can be a couse of HDD failure.
2. When placing HDD on a workbench, provide a mat on a bench for shock absorption and anti-static purpose.
3. When installing HDD, release it from your hands only after confirming that it is fully set on the chassis.
4. Avoid stacking up HDD.
5. HDD is unstable and easy to fall. Do not stand it on its side face.
6. When handling HDD, hold its side faces to avoid static hazard.
7. Do not place HDD on its wrapping bag after removal. (Prevention of static hazard.
8. Use a screwdriver with low impact and anti-static features.

(CAUTION)

- After replacemenet HDD, please process initialization HDD with [HDD Initialization disk] and must update the latest system software.
- Shipment after repairing, checking set, please delete recorded data in set. for reference, follow below instruction

(1) Top menu - Other - Select all tunes, delete all tunes in sub menu, data in HDD be deleted.

(2) After power off by pressing power button, pulling out and remove the electrical outlet.

24.3. Precaution of Repairing Digital P.C.B.

Repairing digital P.C.B, except special IC replacement, process below with technician viewpoint.

(1) Reformat HDD.

(2) With copyright problem, backup data in personal computer can not be return to HDD.

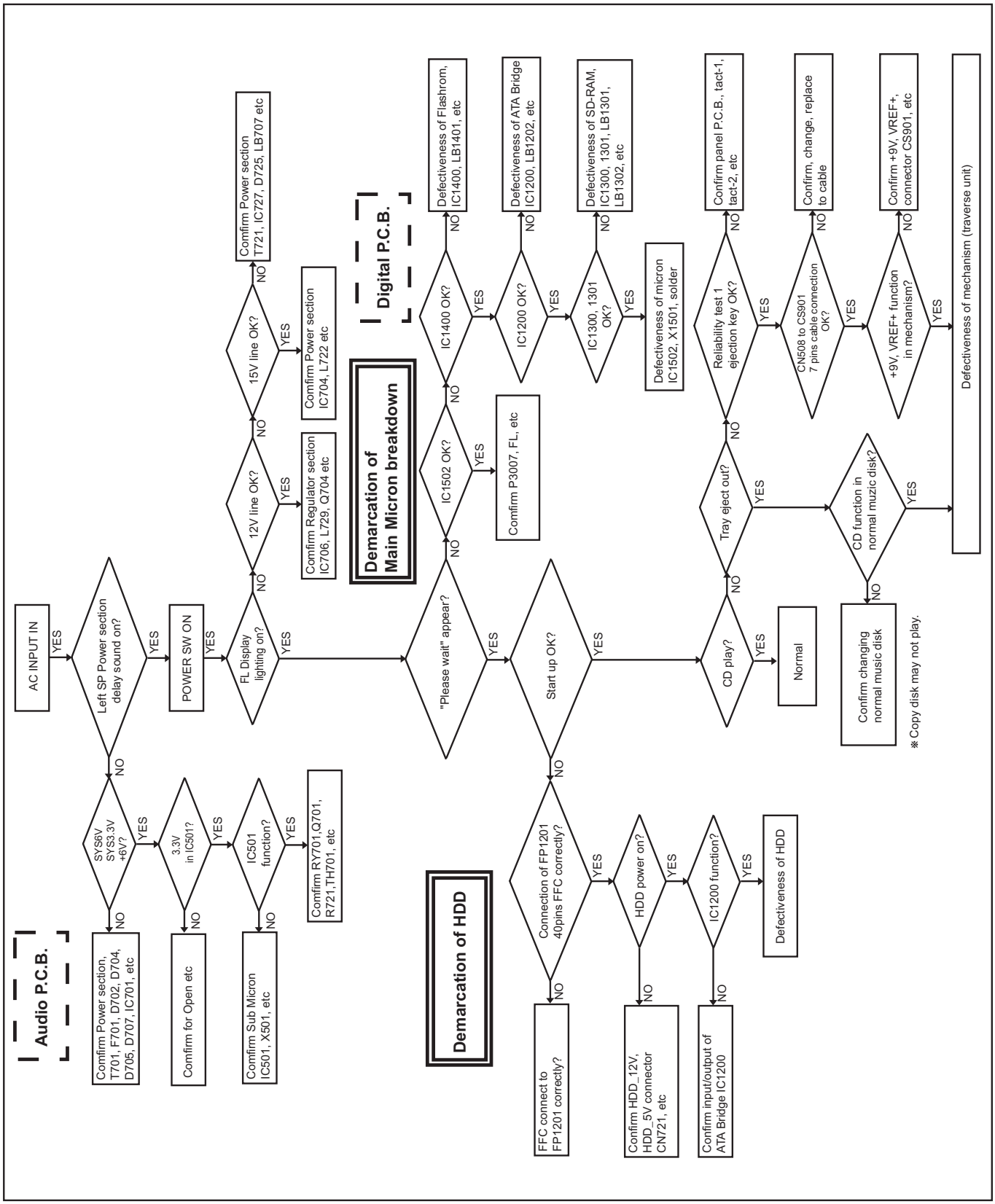
(CAUTION)

- After replacemenet digital P.C.B. and IC1400, please process initialization HDD with [HDD Initialization disk] and must update the latest system software.
- Shipment after repairing, checking set, please delete recorded data in set. for reference, follow below instruction

(1) Top menu - Other - Select all tunes, delete all tunes in sub menu, data in HDD be deleted.

(2) After power off by pressing power button, pulling out and remove the electrical outlet.

24.4. Troubleshooting Flowchart of HDD Unit, CD Drive Unit & Main Micron (IC1502)


Audio P.C.B.
AC INPUT IN
Left SP Power section delay sound on?
Confirm Power section, T701, F701, D702, D704, D705, D707, IC701, etc
POWER SW ON
Confirm for Open etc
FL Display lighting on?
12V line OK?
Confirm Regulator section IC706, L729, Q704 etc
15V line OK?
Confirm Power section IC704, L722 etc
Confirm Power section T721, IC727, D725, LB707 etc
SYS6V SYS3.3V +6V?
3.3V in IC501?
IC501 function?
Confirm Sub Micron IC501, X501, etc
Confirm RY701,Q701, R721,TH701, etc
Demarcation of Main Micron breakdown
Digital P.C.B.
"Please wait" appear?
IC1502 OK?
Confirm P3007, FL, etc
IC1400 OK?
Defectiveness of Flashrom, IC1400, LB1401, etc
IC1200 OK?
Defectiveness of ATA Bridge IC1200, LB1202, etc
IC1300, 1301 OK?
Defectiveness of SD-RAM, IC1300, 1301, LB1301, LB1302, etc
Defectiveness of micron IC1502, X1501, solder
Demarcation of HDD
Start up OK?
Connection of FP1201 40pins FFC correctly?
FFC connect to FP1201 correctly?
HDD power on?
Confirm HDD_12V, HDD_5V connector CN721, etc
IC1200 function?
Confirm input/output of ATA Bridge IC1200
Defectiveness of HDD
CD play?
Normal
Tray eject out?
Reliability test 1 ejection key OK?
Confirm panel P.C.B., tact-1, tact-2, etc
CN508 to CS901 7 pins cable connection OK?
Confirm, change, replace to cable
+9V, VREF+ function in mechanism?
Confirm +9V, VREF+, connector CS901, etc
CD function in normal muzic disk?
Confirm changing normal music disk
※Copy disk may not play.
Defectiveness of mechanism (traverse unit)
YES
NO

25 Terminal Function of ICs

25.1. IC501 (RFKWERE006PA): IC System Control

Pin No.	Terminal Name	I/O	Function
1	F_SHIFT	O	Shift of the operational frequency of DSP
2	NMI	-	CONNECT TO VCC EXTERNAL INTERRUPT I/P (3.3V) via resistor
3	MPSW	I	Music Port Switch
4	DVD_STAT	I	STATUS signal from the DVD Module
5	DVD_CMD	O	CMD signal for the DVD Module
6	DVD_CLK	I	CLK signal for the DVD Module
7	WM_SDATAI	I	Serial Data Input
8	WM_SDATAO	O	Serial Data Out
9	WM_SCLK	O	Serial Data Clock
10	OCD_SCL	I	On-chop Debugger Clock
11	OCD_SDA	I/O	On-chop Debugger Data I/O port
12	CKSEL1	I	CPU Core Clock Setting
13	CKSEL0	I	CPU Core Clock Setting
14	ZFLAG	-	Not use OPEN
15	WM_IDSET	O	Module Detection
16	POWER_DET3	I	Power Abnormal Detection 3
17	VSS	-	GND
18	POWER_DET1	-	Power Abnormal Detection 1
19	VDD1	-	Vdd port1
20	POWER_DET2	-	Power Abnormal Detection 2
21	DES2	I	Set Type Setting
22	KEY2	I	Key Input 2
23	KEY1	I	Key Input 1
24	XM_Rxd	I	Receive XM Radio Serial Data
25	XM_Txd	O	Send XM Radio Serial Data
26	DPORTDET1	I	DPORT Connector Detection 1
27	DPOTDET2	I	DPORT Connector Detection 2
28	DPORTCHG	I	DPORT Charger End Detection
29	GAIN_SEL	O	GAIN Selector
30	DSP_RESET	O	DSP Reset Signal
31	AVDD	-	AVDD Power Supply
32	WM_LINK	I	Link Detection
33	RDS_DATA	-	RDS Data (No connection)
34	RDS_CLK	-	RSD Clock (No connection)
35	TMOD	I	Mode Setting
36	MOD	I	Mode Setting
37	MEMMOD	I	Memory Setting
38	DPORTDE3	I	DPORT Connector Detection 3
39	WMMUTE	O	Wireless Module Mute
40	FL_CS	O	FL Controler
41	DAC_CS	O	DA Convert
42	HP_MUTE	O	Headphone Muting control
43	S1	O	Switch 1
44	S2	O	Switch 2
45	HDTX_CTRL	O	HDMI control
46	VDD3	-	Vdd port3
47	AOUT_SEL0	O	Selector
48	AOUT_SEL1	O	Selector
49	EPROMDATA	O	12C EEPROM Data
50	EPROMCLK	O	12C EEPROM Clock
51	DMIX_ENABLE	O	D-MIX Enable
52	CRTIM	I/O	CRTIM
53	FANON	I	Fan Enable
54	FPGA_RST	O	FPGA Reset
55	TRY_CW	O	TRY Rotate
56	TRY_CCW	O	TRY Rotate
57	PELI_SDA	I/O	
58	PERI_SCL	I/O	
59	RST_OUT	O	Reset Output
60	SWPS_BP	O	
61	VDD1	-	Vdd1 power
62	DAMP_RESET	O	Digital Amp Reset
63	VSS	-	Vss power
64	NRST	-	Reset Input
65	XM_PCONT	O	XM Radio Power Control
66	RDS_RDY	-	RDS Ready
67	X1	-	Oscillator I/P
68	X0	-	Oscillator O/P
69	VDD3	-	3.3V Voltage
70	VOUT/VDD1	-	1.8V Voltage
71	LON	-	Internal Regular Setting Port (L: when using internal regulator)
72	OSC1	-	Oscillator I/P
73	OSC0	-	Oscillator O/P
74	VSS	-	Vss power
75	PCONT5	O	10V Power Control
76	VDD1	-	1.8V Voltage
77	PCONT4	O	3.5V Power Control
78	PCONT3	O	Power Control3
79	PCONT2	O	Power Control2
80	PCONT1	O	Power Control1
81	2CH_SEL	I	2 Channel Selector
82	WM_CHDIR	O	Wireless Module
83	MUTE	O	Mute
84	LIN_OUT_MUTE	-	No connection
85	A_MUTE	O	Mute
86	VSS	-	Vss power
87	TRAY_OPEN	I	Tray Open
88	TRAY_CLOSE	I	Tray Close
89	TRAY_BRAKE	O	Tray Brake
90	XM_DAC_RST	O	XM Radio DAC Reset
91	XM_DTIC_RST	O	XM Radio DTIC Reset
92	XM_MUTE	O	XM Radio Mute
93	XM_ACTIVE	I	XM Radio Active
94	LED_1	O	Light LED 1
95	LED_2	O	Light LED 2
96	SD	I	SD Drive
97	XM_I2SRATE	I	XM I2SRATE
98	XM_ANTREV	I	"XM Antenna Receive (H: Mismatch Antenna) (L: Matching Antenna)"
99	WM_DETECT	I	Wireless Module Detection
100	PELI_CLK	O	
101	PELI_DI	I	
102	PELI_DO	O	
103	SCART_CNT1	-	No connection
104	SCART_CNT2	-	No connection
105	SCART_CNT3	-	No connection
106	VDD3	-	VDD3 Power
107	TN_SD	-	Tunner Detection
108	SENSE2	-	
109	HP_SW	-	Headphone Switch
110	HOT_PLG	-	
111	HALT	-	
112	SUBIO1	-	
113	REM_IN	-	REMOCON Input
114	CEC_IN	I	HDMI/CEC Input
115	CEC_OUT	O	HDMI/CEC Output
116	TN_ST	I	
117	JOG_1	I	Volume Jog 1
118	JOG_2	I	Volume Jog 2
119	SH_COM_IN	I	Main Micon Command Input
120	SH_COM_OUT	O	Main Micon Command Output
121	ACDET1	I	AC Detection 1
122	DPORT_RXD	I	DPORT Data Receive

123	DPORT_TXD	O	DPORT Data Send
124	FAN_CONTF	O	Fan Enable
125	VSS	-	Vss power
126	VDD1	-	Vdd1 power
127	VDD3	-	Vdd3 power
128	VPP(VD3)	-	Vpp power

25.2. IC800 (C0HBB0000057): IC FL Display Driver

Pin No.	Terminal Name	I/O	Function
1	LED1	O	LED Output
2	LED2	O	LED Output
3	LED3	O	LED Output
4	LED4	O	LED Output
5	OSC	I	Oscillator Input
6	DOUT	-	Data Output (No connection)
7	DIN	I	Data Input
8	CLK	I	Clock Input
9	STB	I	Serial Interface Strobe
10	K1	-	Key Data Input (No connection)
11	K2	-	Key Data Input (No connection)
12	VSS	-	Logic Ground
13	VDD	-	Logic Power Supply
14	P18	-	High-Voltage Segment Output (No connection)
15	P17	O	High-Voltage Segment Output
16	P16	O	High-Voltage Segment Output
17	P15	O	High-Voltage Segment Output
18	P14	O	High-Voltage Segment Output
19	P13	O	High-Voltage Segment Output
20	P12	O	High-Voltage Segment Output
21	P11	O	High-Voltage Segment Output
22	P10	O	High-Voltage Segment Output
23	P9	O	High-Voltage Segment Output
24	P8	O	High-Voltage Segment Output
25	P7	O	High-Voltage Segment Output
26	P6	O	High-Voltage Segment Output
27	P5	O	High-Voltage Segment Output
28	P4	O	High-Voltage Segment Output
29	P3	O	High-Voltage Segment Output
30	-VP	-	Pull-Down Level
31	P2	O	High-Voltage Segment/Grid Output
32	P1	O	High-Voltage Segment/Grid Output
33	G1	O	High-Voltage Segment/Grid Output
34	G2	O	High-Voltage Segment/Grid Output
35	G3	O	High-Voltage Segment/Grid Output
36	G4	O	High-Voltage Segment/Grid Output
37	G5	O	High-Voltage Segment/Grid Output
38	G6	O	High-Voltage Segment/Grid Output
39	G7	O	High-Voltage Grid Output
40	G8	O	High-Voltage Grid Output
41	G9	O	High-Voltage Grid Output
42	G10	O	High-Voltage Grid Output
43	VCC	-	Logic Power Supply
44	VSS	-	Logic Ground

25.3. IC1101 (C1CB00002054): IC LAN (Ethermet Controller)

Pin No.	Terminal Name	I/O	Function
1	GND_CORE	-	Internal Digital Logic Circuit GND Port
2	VREG	-	Internal Regulator Power Supply Port (+3.3V)
3	VDD_CORE	-	Power Supply Port from Internal Regulator (+1.8V)
4	VSS_PLL	-	PLL GND Port
5	XTAL2	O	External 25MHz Oscillator Output
6	XTAL1	I	External 25MHz Oscillator Input
7	VDD_PLL	-	Power Supply Port from Internal Regulator (+1.8V)
8	VDD_REF	-	Connect to +3.3V
9	ATEST	-	Connect to +3.3V
10	RBIAS	-	PLL Bias Circuit Port (connect resistor to GND)
11	VSS_REF	-	Internal PLL Voltage Reference GND
12	A7	I	7bit address input
13	A6	I	7bit address input
14	A5	I	7bit address input
15	A4	I	7bit address input
16	A3	I	7bit address input
17	A2	I	7bit address input
18	A1	I	7bit address input
19	GND_IO	-	GND (0V)
20	VDD_IO	-	Power supply (+3.3V)
21	D31	O	Bi-direction Data Input/output
22	D30	O	Bi-direction Data Input/output
23	D29	O	Bi-direction Data Input/output
24	D28	O	Bi-direction Data Input/output
25	D27	O	Bi-direction Data Input/output
26	D26	O	Bi-direction Data Input/output
27	GND_IO	-	GND (0V)
28	VDD_IO	-	Power supply (+3.3V)
29	D25	O	Bi-direction Data Input/output
30	D24	O	Bi-direction Data Input/output
31	D23	O	Bi-direction Data Input/output
32	D22	O	Bi-direction Data Input/output
33	D21	O	Bi-direction Data Input/output
34	GND_IO	-	GND (0V)
35	VDD_IO	-	Power supply (+3.3V)
36	D20	O	Bi-direction Data Input/output
37	D19	O	Bi-direction Data Input/output
38	D18	O	Bi-direction Data Input/output
39	D17	O	Bi-direction Data Input/output
40	D16	O	Bi-direction Data Input/output
41	GND_IO	-	GND (0V)
42	VDD_IO	-	Power supply (+3.3V)
43	D15	O	Bi-direction Data Input/output
44	D14	O	Bi-direction Data Input/output
45	D13	O	Bi-direction Data Input/output
46	D12	O	Bi-direction Data Input/output
47	GND_IO	-	GND (0V)
48	VDD_IO	-	Power supply (+3.3V)
49	D11	O	Bi-direction Data Input/output
50	D10	O	Bi-direction Data Input/output
51	D9	O	Bi-direction Data Input/output
52	D8	O	Bi-direction Data Input/output
53	D7	O	Bi-direction Data Input/output
54	GND_IO	-	GND (0V)
55	VDD_IO	-	Power supply (+3.3V)
56	D6	O	Bi-direction Data Input/output
57	D5	O	Bi-direction Data Input/output
58	D4	O	Bi-direction Data Input/output
59	D3	O	Bi-direction Data Input/output
60	GND_IO	-	GND (0V)
61	VDD_IO	-	Power supply (+3.3V)
62	D2	O	Bi-direction Data Input/output
63	D1	O	Bi-direction Data Input/output
64	D0	O	Bi-direction Data Input/output
65	VDD_CORE	-	Power Supply Port from Internal Regulator (+1.8V)
66	GND_CORE	-	Internal Digital Logic Circuit GND Port

67	EEDIO	O	Serial EEPROM Data Input/Output (not used; OPEN)
68	EECS	O	Serial EEPROM Chip Select Output (not used; OPEN)
69	EECLK	O	Serial EEPROM Clock Output
70	PME	O	System Start Up Request Signal Output
71	NC	-	No Connection
72	IRQ	O	Interrupt Request Signal Output to enable Program
73	NC	-	No Connection
74	SPEED_SEL	I	Defective Ethernet Setting Selection Signal Input
75	NC	-	No Connection
76	FIFO_SEL	I	RX or TX Data FIFO Input
77	VSS_A	-	Analog Circuit GND
78	TPO-	O	Twist Pair Transmission (-) Output
79	TPO+	O	Twist Pair Transmission (+) Output
80	VSS_A	-	Analog Circuit GND
81	VDD_A	-	Analog Circuit Power Supply Port (+3.3V)
82	TPI-	I	Twist Pair Receiving (-) Input
83	TPI+	I	Twist Pair Receiving (+) Input
84	NC	-	No Connection
85	VDD_A	-	Analog Circuit Power Supply Port (+3.3V)
86	VSS_A	-	Analog Circuit GND
87	EXRES1	-	Resistor to connect to GND
88	VSS_A	-	Analog Circuit GND
89	VDD_A	-	Analog Circuit Power Supply Port (+3.3V)
90	NC2	-	No Connection
91	NC1	-	No Connection
92	nRD	I	Read Enable Signal Input
93	nWR	I	Write Enable Signal Input
94	nCS	I	Chip Select Signal Input
95	nRESET	I	RESET Signal Input
96	GND_IO	-	GND (0V)
97	VDD_IO	-	Power supply (+3.3V)
98	GPIO0/nLED3	-	Not used; OPEN
99	GPIO1/nLED2	-	Not used; OPEN
100	GPIO2/nLED1	-	Not used; OPEN

25.4. IC1200 (C1DB00001549): IC Link/Transaction Controller

Pin No.	Terminal Name	I/O	Function
1	XO	O	Oscillator Output
2	VSS	-	GND Port
3	LVDD	-	1.8V Voltage
4	VSS	-	GND Port
5	R1_B	-	No connection
6	VSS	-	GND Port
7	VSS	-	GND Port
8	HVDD	-	3.3V Voltage
9	DM_B	-	USB Device Data Line (Data -) No connection
10	VSS	-	GND Port
11	DP_B	-	USB Device Data Line (Data +) No connection
12	HVDD	-	3.3V Voltage
13	VBUS_B	-	USB Device Bus Signal Detect No connection
14	LVDD	-	1.8V Voltage
15	VSS	-	GND Port
16	NC	-	No connection
17	LVDD	-	1.8V Voltage
18	VSS	-	GND Port
19	CVDD	-	1.8V-3.3V Voltage
20	XRESET	I	SIGNAL RESET
21	XBEL(CA0)	I	
22	CA1	I	CPU Address
23	CA2	I	CPU Address
24	CA3	I	CPU Address
25	CA4	I	CPU Address
26	CA5	I	CPU Address
27	CA6	I	CPU Address
28	CA7	I	CPU Address
29	CA8	I	CPU Address
30	XCS	I	Chip Selector Signal
31	XRD	I	Chip Data Receive
32	XWRH	I	
33	XWRL	I	
34	VSS	-	GND Port
35	CVDD	-	1.8V-3.3V Voltage
36	VSS	-	GND Port
37	XINT	O	
38	XDREQ0	O	
39	XDACK0	I	
40	XDREQ1	O	
41	XDACK1	I	
42	LVDD	-	1.8V Voltage
43	VSS	-	GND Port
44	CD0	I/O	CPU Data Bus
45	CD1	I/O	CPU Data Bus
46	CD2	I/O	CPU Data Bus
47	CD3	I/O	CPU Data Bus
48	CD4	I/O	CPU Data Bus
49	CVDD	-	1.8V-3.3V Voltage
50	VSS	-	GND Port
51	CD5	I/O	CPU Data Bus
52	CD6	I/O	CPU Data Bus
53	CD7	I/O	CPU Data Bus
54	VSS	-	GND Port
55	CD8	I/O	CPU Data Bus
56	CD9	I/O	CPU Data Bus
57	CD10	I/O	CPU Data Bus
58	CD11	I/O	CPU Data Bus
59	CD12	I/O	CPU Data Bus
60	CD13	I/O	CPU Data Bus
61	CD14	I/O	CPU Data Bus
62	CD15	I/O	CPU Data Bus
63	LVDD	-	1.8V Voltage
64	CVDD	-	1.8V-3.3V Voltage
65	HVDD	-	3.3V Voltage
66	LVDD	-	1.8V Voltage
67	VSS	-	GND Port
68	XHRESET	O	IDE bus reset
69	HDD7	I/O	IDE data bus
70	HDD8	I/O	IDE data bus
71	HDD6	I/O	IDE data bus
72	HDD9	I/O	IDE data bus
73	VSS	-	GND Port
74	HDD5	I/O	IDE data bus
75	HDD10	I/O	IDE data bus
76	HDD4	I/O	IDE data bus
77	HDD11	I/O	IDE data bus
78	LVDD	-	1.8V Voltage
79	VSS	-	GND Port
80	HVDD	-	3.3V Voltage
81	HDD3	I/O	IDE data bus
82	HDD12	I/O	IDE data bus
83	HDD2	I/O	IDE data bus
84	HDD13	I/O	IDE data bus
85	VSS	-	GND Port
86	HDD1	I/O	IDE data bus
87	HDD14	I/O	IDE data bus
88	HDD0	I/O	IDE data bus
89	HVDD	-	3.3V Voltage
90	HDD15	I/O	IDE data bus

91	HDMARQ	I	DMA Transfer Request
92	XHIOW	O	
93	XHIOR	O	
94	HIORDY	I	IDE Register Ready Signal
95	XHDMACK	O	DMA transfer permission
96	HINTRQ	I	IDE Interrupt request
97	HDA1	O	IDE register address
98	XHPDIAG	I	
99	HDA0	O	IDE register address
100	LVDD	-	1.8V Voltage
101	VSS	-	GND Port
102	HVDD	-	3.3V Voltage
103	HDA2	O	IDE register address
104	XHCS1	O	Control Register Access Chip Selector
105	XHCS1	O	Comand Block Register Access Chip Selector
106	XHDASP	I	Drive active
107	VBUSFLG_A	-	No connection
108	VBUSEN_A	-	No connection
109	LVDD	-	1.8V Voltage
110	VSS	-	GND Port
111	R1_A	-	No connection
112	VSS	-	GND Port
113	HVDD	-	3.3V Voltage
114	DM_A	-	No connection
115	VSS	-	GND Port
116	DP_A	-	No connection
117	HVDD	-	3.3V Voltage
118	LVDD	-	1.8V Voltage
119	VSS	-	GND Port
120	TEST	I	TEST Terminal
121	TDO	-	No connection
122	TCK	I	JTAG TCK Terminal
123	HVDD	-	3.3V Voltage
124	TMS	I	JTAG TMS Terminal
125	TDI	I	JTAG TDI Terminal
126	TRST	I	JTAG TRST Terminal
127	LVDD	-	1.8V Voltage
128	XI	I	12MHz/24MHz Oscillator Output

25.5. IC1502 (C2GBC0000300): IC Microcomputer

Pin No.	Terminal Name	I/O	Function
1	A1(EXTAL)	I	16.66MHz Oscillator Input
2	A2(XTAL)	O	16.66MHz Oscillator Output
3	A3(V33)	O	+3.3V Voltage
4	A4(V15)	O	+1.5V Voltage
5	A5(PCMBCK)	I/O	PCMBCK
6	A6(SW10_1)	I/O	Banbi SWÇP
7	A7(MODE_SEL)	I/O	Model Selector
8	A8(PCMMC)	-	Timer
9	A9(PCMMS)	-	Timer
10	A10(DAC_MUTE)	I/O	DAC Mute
11	A11(SH_TXD2)	I/O	Sub Mircon Trasmit Data
12	A12(SH_RXD2)	I/O	Sub Mircon Receive Data
13	A13(SD_OPEN)	I/O	SD Open
14	A14(SUBIO3)	I/O	Sub IO
15	A15(MNRESET)	I/O	MNRESET
16	A16(EXTXD0)	I/O	EXTXD0
17	A17(Pull Up)	O	Pull Up
18	A18(NC)	-	Not Connection
19	A19(V15)	-	+1.5V Voltage
20	A20(Pull)	O	Up
21	B1(RESET#)	O	Reset
22	B2(VSS)	-	GND
23	B3(V15)	-	+1.5V Voltage
24	B4(VSS)	-	GND
25	B5(PCMLRCK)	-	LR Clock PCMLRCK
26	B6(ADCKSELN)	I/O	ADCK Selector
27	B7(SSI_CNT)	I/O	SSI Control
28	B8(SUBIO1)	I/O	SUBIO1
29	B9(PCMMD)	I/O	PCMMD
30	B10(Pull/Up)	O	NMI
31	B11(SH_SCRCLK1)	I/O	TFT
32	B12(SH_SCRTXD1)	I/O	TFT
33	B13(SH_SCRRXD1)	I/O	Pull
34	B14(SH_SCRCE)	I/O	TFT
35	B15(BIT_CLK_CNT)	I/O	BIT Clock count
36	B16(EXRXD0)	I/O	EXRXD0
37	B17(MD3/#CE2A)	O	Pull
38	B18(VSS)	O	GND VSS
39	B19(Pull/Up)	O	Pull/Up
40	B20(V33)	-	+3.3V Voltage
41	C1(#RDY)	O	Data Request Ready
42	C2(BIT_CLK0)	O	BIT_CLK0
43	C3(VSS)	-	GND VSS
44	C4(AKRST)	O	AKRST
45	C5(PCMDT)	I/O	PCMDT
46	C6(AKDT)	I/O	AKDT
47	C7(V15)	-	+1.5V Voltage
48	C8(#ASEBRK)	O	#ASEBRK
49	C9(V33)	-	+3.3V Voltage
50	C10(TMS)	O	TMS
51	C11(V33)	-	+3.3V Voltage
52	C12(TDO(JTAG))	O	TDO(JTAG)
53	C13(V33)	-	+3.3V Voltage
54	C14(V33)	-	+3.3V Voltage
55	C15(TCK)	O	TCK
56	C16(Pull)	O	Down
57	C17(NC)	-	Not connection
58	C18(SW10_2)	O	Swtich
59	C19(VSS)	-	GND VSS
60	C20(Pull)	O	Down
61	D1(BLON_OUT)	O	Back Light ON
62	D2(AKSCLK)	O	AD Conveter Serial Clock
63	D3(AKLRCK)	O	AD Conveter LR Clock
64	D4(BIT_CLK_Z0)	O	BIT Clock
65	D5(Pull)	O	Up
66	D6(NC)	-	Not Connection
67	D7(VSS)	-	GND VSS
68	D8(NC)	-	Not Connection
69	D9(VSS)	-	GND VSS
70	D10(TRST)	O	Jtag TEST
71	D11(VSS)	-	GND VSS
72	D12(TDI)	O	TDI
73	D13(VSS)	-	GND VSS
74	D14(VSS)	-	GND VSS
75	D15(VSS)	-	GND VSS
76	D16(Pull)	O	Up
77	D17(Pull)	O	Up
78	D18(NC)	-	Not Connection
79	D19(DACK1)	O	DMA DACK1
80	D20(Pull/Up)	O	NT_PL_OUT
81	E1(LCDD8)	O	TFT LCDD8
82	E2(NC)	-	Not Connection
83	E3(Pull)	O	Up
84	E4(Pull)	O	Up
85	E17(VSS)	-	GND VSS
86	E18(V33)	-	+3.3V Voltage
87	E19(Pull)	O	Up
88	E20(DREQ1)	O	DMA Transfer Request 1
89	F1(LCDD9)	O	LCD Data9

Pin No.	Terminal Name	I/O	Function
90	F2(LCDD0)	O	LCD Data0
91	F3(CS0N)	I/O	Chip Selector ON
92	F4(DIMMER)	O	LCD Power Control
93	F17(Pull)	I/O	Up
94	F18(Pull)	I/O	Up
95	F19(Pull)	I/O	Up
96	F20(Pull)	I/O	Up
97	G1(LCDD10)	O	TFT LCDD10
98	G2(LCDD1)	O	LCD Data1
99	G3(V15)	-	+1.5V Voltage
100	G4(VSS)	-	GND VSS
101	G17(VSS)	-	GND VSS
102	G18(V15)	-	+1.5V Voltage
103	G19(Pull)	O	Up
104	G20(Pull)	O	Up
105	H1(CS1N)	I/O	Chip Selector 1N
106	H2(LCDD2)	O	LCDD2
107	H3(V33)	-	+3.3V Voltage
108	H4(VSS)	-	GND VSS
109	H17(Pull)	O	Up
110	H18(Pull)	O	Up
111	H19(NC)	-	Not Connection
112	H20(NC)	-	Not Connection
113	J1(ADCKSELN)	O	
114	J2(LCDD3)	O	LCD Data 3
115	J3(CS2N)	I/O	Chip Selector 2N
116	J4(NC)	-	Not Connection
117	J17(VSS)	-	GND VSS
118	J18(V33)	-	+3.3V Voltage
119	J19(Open)	I/O	FPGA_PROG
120	J20	O	
121	K1(LCDD12)	O	TFT LCD Data12
122	K2(NC)	-	Not Connection
123	K3(LCDD4)	O	TFT LCD Data4
124	K4(VSS)	-	GND VSS
125	K17(VSS)	-	GND VSS
126	K18(AV33)	-	Power +3.3V
127	K19(DV5_ON)	O	DV5.0 Signal ON
128	K20(CNTDI)	I/O	NT_PL_IN
131	L3(LCDD5)	O	LCDD5
132	L4(A20)	O	Address Bus A20
133	L17(Pull)	O	Dn
134	L18(Pull_Dn)	O	Pull_Dn
135	L19(Pull_Dn)	O	Pull_Dn
136	L20(Pull_Dn)	O	Pull_Dn
137	M1(LCDD4)	O	LCD Data4
138	M2(LCDD7)	O	LCD Data7
139	M3(A21)	O	Address bus A21
140	M4(V33)	-	+3.3V Voltage
141	M17(VSS)	-	GND VSS
142	M18(V33)	-	+3.3V Voltage
143	M19(#SDINT)	O	SD interrupt
144	M20(Pull)	O	Up
145	N1(CS5N)	O	Chip Seletor
146	N2(NC)	-	Not Connection
147	N3(NC)	-	Not Connection
148	N4(VSS)	-	GND VSS
149	N17(VSS)	-	GND VSS
150	N18(V33)	-	+3.3V Voltage
151	N19(#ATAINT)	O	#ATAINT
152	N20(Pull)	O	Up
153	P1(BIT_CLK_CNT)	O	BIT_CLK_CNT
154	P2(NC)	-	Not Connection
155	P3(VSS)	-	GND VSS
156	P4(V15)	-	+1.5V Volatge
157	P17(VSS)	-	GND VSS

Pin No.	Terminal Name	I/O	Function
158	P18(V15)	-	+1.5V Voltage
159	P19(Open)	O	CD_SEL
160	P20(AACCLKTB)	O	AAC Clock Select
161	R1(A1)	O	Address bus A1
162	R2(NC)	-	Not Connection
163	R3(LCDCL1)	O	LCDCL1
164	R4(A0)	O	Address bus A0
165	R17(NC)	-	Not Connection
166	R18(NC)	-	Not Connection
167	R19(CNTLD)	O	CNTLD
168	R20(NC)	-	not Connection
169	T1(LCDFLM)	O	LCDFLM
170	T2(LCDDISP)	O	LCDDISP
171	T3(D11)	O	Data bus D11
172	T4(LCDCL2)	O	LCDCL2
173	T17(A22)	O	Address bus A22
174	T18(A23)	O	Address bus A23
175	T19(NC)	-	Not Connection
176	T20(NC)	-	Not Connection
177	U1(D15)	-	Data bus D15
178	U2(D0)	O	Data bus D0
179	U3(D3)	O	Data bus D3
180	U4(V33)	-	+3.3V Voltage
181	U5(VSS)	-	GND VSS
182	U6(CKE)	O	SDRAM Clock Enable Output
183	U7(VSS)	-	GND VSS
184	U8(VSS)	-	GND VSS
185	U9(A17)	O	Address bus A17
186	U10(VSS)	-	GND VSS
187	U11(VSS)	-	GND VSS
188	U12(VSS)	-	GND VSS
189	U13(A18)	O	Address bus A18
190	U14(VSS)	-	GND VSS
191	U15(A19)	O	Address bus A19
192	U16(VSS)	-	GND VSS
193	U17(D20)	O	Data bus D20
194	U18(D28)	O	Data bus D28
195	U19(D16)	O	Data bus D16
196	U20(D31)	O	Data bus D31
197	V1(D14)	O	Data bus D14
198	V2(D1)	O	Data bus D1
199	V3(V33)	-	+3.3V Voltage
200	V4(D10)	O	Data bus D10
201	V5(V33)	-	+3.3V Voltage
202	V6(A2)	O	Address bus A2
203	V7(V15)	-	+1.5V Voltage
204	V8(V33)	-	+3.3V Voltage
205	V9(A7)	O	Address bus A7
206	V10(V33)	-	+3.3V Voltage
207	V11(V33)	-	+3.3V Voltage
208	V12(V33)	-	+3.3V Voltage
209	V13(A15)	O	Address bus A15
210	V14(V15)	-	+1.5V Voltage
211	V15(A16)	O	Address bus A16
212	V16(V33)	-	+1.5V Volatge
213	V17(D21)	O	Data bus D21
214	V18(V33)	-	+1.5V Voltage
215	V19(D17)	O	Data bus D17
216	V20(D30)	O	Data bus D30
217	W1(D2)	O	Data bus D2
218	W2(VSS)	-	GND VSS
219	W3(D4)	O	Data bus D4
220	W4(D6)	O	Data bus D6
221	W5(D7)	O	Data bus D7
222	W6(RDWRN)	I/O	Read/Write RDWRN
223	W7(WE0N)	O	Write Enable ON

Pin No.	Terminal Name	I/O	Function
224	W8(A4)	O	Address bus A4
225	W9(A6)	O	Address bus A6
226	W10(A8)	O	Address bus A8
227	W11(A10)	O	Address bus A10
228	W12(A12)	O	Address bus A12
229	W13(A14)	O	Address bus A14
230	W14(WE2N)	I	Write Enable WE2N
231	W15(RASN)	O	RAS
232	W16(D24)	O	Data bus D24
233	W17(D25)	O	Data bus D25
234	W18(D27)	O	Data bus D27
235	W19(VSS)	-	GND VSS
236	W20(D29)	O	Data bus D29
237	Y1(D13)	O	Data bus D13
238	Y2(D12)	O	Data bus D12
239	Y3(D5)	O	Data bus D5
240	Y4(D9)	O	Data bus D9
241	Y5(D8)	O	Data bus D8
242	Y6(RDN)	O	Read Enable/CAS
243	Y7(WE1N)	O	Write Enable 1N
244	Y8(A3)	O	Address A3
245	Y9(A5)	O	Address A5
246	Y10(CKION)	O	Clock Output ON
247	Y11(A9)	O	Address bus A9
248	Y12(A11)	O	Address bus A11
249	Y13(A13)	O	Address bus A13
250	Y14(WE3N)	O	Write Enable 3N
251	Y15(CS3N)	I/O	Chip Selector 3N
252	Y16(D23)	O	Data bus D23
253	Y17(D22)	O	Data bus D22
254	Y18(D26)	O	Data bus D26
255	Y19(D19)	O	Data bus D19
256	Y20(D18)	O	Data bus D18

25.6. IC1800 (MN677382FV): IC Sub Microprocessor

Pin No.	Terminal Name	I/O	Function
1	VDDCORE	-	Internal Power Supply Port
2	ACLKO	O	Audio Clock Buffer Output
3	NPDOWNIO	-	Power Supply based on Pull-up resistor
4	D14	O	Data I/O 14
5	D15	O	Data I/O 15
6	VSSIO	-	GND Port
7	BLKCK	I	Block Clock Input
8	VDDIO	-	I/O Power Supply Port
9	NCLDCK	I	NCLDCK Input
10	ADIN	I	External AD Serial Input
11	CDIN	I	CD Data Input
12	SUBC	I	Subcode Input
13	VDDIO	-	I/O Power Supply Port
14	IECIN	I	Optic Input IEC-958
15	VSSCORE	-	GND Port
16	LRCLK1	I	L/R Clock Input
17	VDDCORE	-	External Power Supply Port
18	BCLK1	I	Bit Clock Input
19	VSSIO	-	GND Port
20	DAOUT	-	External D/A Converter Serial Output (not used; OPEN)
21	VSS_SD1	-	GND
22	SDCD	I	SD Card Detection Signal Input
23	VDD_SD1	-	Vdd Voltage Supply
24	SDWP	I	SD Write Protect Signal Input
25	VSS_SD2	-	GND
26	SDCLK	O	SD Clock Output
27	VDD_SD2	-	VDD Voltage Supply
28	SDDATA0	O	SD Data I/O 0
29	SDDATA1	O	SD Data I/O 1
30	SDDATA2	O	SD Data I/O 2
31	SDDATA3	O	SD Data I/O 3
32	SDCMD	I	SD Command I/O
33	AVSS_USB	-	USB Analog GND Port
34	AVDD_USB	-	USB Analog Power Supply Port
35	VDD_PLL0	-	Audio Side PLL Power Supply Port
36	NC	-	Not Used; OPEN
37	NC	-	Not Used; OPEN
38	VSS_PLL0	-	Audio Side PLL GND Port
39	NC	-	Not Used; OPEN
40	VSS_PLL1	-	USB Side PLL GND Port
41	VDD_PLL1	-	USB Side PLL Power Supply Port
42	DM	O	USB D(-) BUS I/O
43	AVDD_USB	-	USB Analog Power Supply Port
44	DP	O	USB D(+) BUS I/O
45	AVSS_USB	-	USB Analog GND Port
46	VSS_DAC	-	D/A Converter GND Port
47	NC	O	Not Used; OPEN
48	VDD_DAC	-	D/A Converter Power Supply Port
49	NC	O	Not Used; OPEN
50	VSSCORE	-	GND Port
51	NPDOWNPL	I	Test Port
52	VDDCORE		Internal Power Supply Port
53	TACKI	I	Audio Clock Test Input
54	VSSIO		GND Port
55	AXI	I	Audio Clock Oscillator Input
56	AXO	O	Audio Clock Oscillator Output
57	VDDIO	-	I/O Power Supply Port
58	VSSCORE	-	GND Port
59	NC	-	Not Used; OPEN
60	VDDCORE	-	Internal Power Supply Port
61	NC	-	Not Used; OPEN
62	VSSIO	-	GND Port
63	TUCKI	I	USB Clock Test Input
64	VDDIO	-	I/O Power Supply Port
65	NC	-	Not Used; OPEN
66	NC	O	Not Used; OPEN
67	AOSCE	-	Audio PLL Control Signal Input
68	NRST	I	System RESET Signal Input
69	TINO	-	Test Port
70	NC	O	Not Used; OPEN
71	CM	I	Clock Mode Selection Signal Input
72	A1	I	Address Input Port 1
73	A2	I	Address Input Port 2
74	DO	O	Data I/O Signal 0
75	NC	-	Not Used; OPEN
76	NC	-	Not Used; OPEN
77	WMODE	-	Write Mode Setting Port
78	VSSIO	-	GND Port
79	UXO	O	USB Clock Oscillator Output
80	UXI	I	USB Clock Oscillator Input
81	VDDIO	-	I/O Power Supply Port
82	VDDCORE	-	Internal Power Supply Port
83	NRAMLLB	I	Low level Byte Write Enable Signal Input
84	VSSCORE		GND Port
85	NRAMLUB	I	Upper level Byte Write Enable Signal Input
86	TEST1	I	Test Mode Select Signal Input

Pin No.	Terminal Name	I/O	Function
87	A3	I	Address Input Port 3
88	A4	I	Address Input Port 4
89	TEST3	I	Test Mode Input Port 3
90	SYSCKNRST	O	External Syscon Clock Output
91	VSSIO	-	GND Port
92	NWT	I	Low level Byte Write Signal Input
93	VDDIO	-	I/O Power Supply Port
94	NINTO	O	Interrupt Signal I/O
95	NEXTDK	O	Data Acknowledge Signal I/O
96	NRD	I	Read Signal Input
97	VSEL1	-	Write Mode Setting Port
98	VSSIO	-	GND Port
99	VSEL0	I	Chip Select Signal Delay Control Input
100	VDDIO	-	I/O Power Supply Port
101	TEST0	I	Test Mode Input Port 0
102	VDDCORE	-	Internal Power Supply Port
103	D1	O	Data I/O 1
104	D2	O	Data I/O 2
105	D3	O	Data I/O 3
106	D4	O	Data I/O 4
107	D5	O	Data I/O 5
108	D6	O	Data I/O 6
109	D7	O	Data I/O 7
110	TEST2	I	Test Mode Input Port 2
111	NCS	I	Chip Select Signal Input
112	A7	I	Address Input Port 7
113	A6	I	Address Input Port 6
114	TEST4	I	Test Mode Input Port 4
115	VSSCORE	-	GND Port
116	NCSA	I	Chip Select Signal Input (reserve)
117	D10	O	Data I/O 10
118	TIN1	-	Test Port
119	A5	I	Address Input Port 5
120	D8	O	Data I/O 8
121	A8	I	Address Input Port 8
122	NC	-	Not Used; OPEN
123	D11	O	Data I/O 11
124	VSSIO	-	GND Port
125	A9	I	Address Input Port 9
126	VDDIO	-	I/O Power Supply Port
127	D9	O	Data I/O 9
128	VSSCORE	-	GND Port
129	PRST	I	Port RESET Signal Input
130	VDDCORE	-	Internal Power Supply Port
131	A11	I	Address Input Port 11
132	VSSCORE	-	GND Port
133	A10	I	Address Input Port 10
134	A12	I	Address Input Port 12
135	VDDIO	-	I/O Power Supply Port
136	VSSIO	-	GND Port
137	SYSCKO	-	Micon Clock Output (not used; OPEN)
138	A13	I	Address Input Port 13
139	NC	-	Not Used; OPEN
140	D13	O	Data I/O 13
141	D12	O	Data I/O 12
142	A14	I	Address Input Port 14
143	NC		Not Used; OPEN
144	A15	I	Address Input Port 15

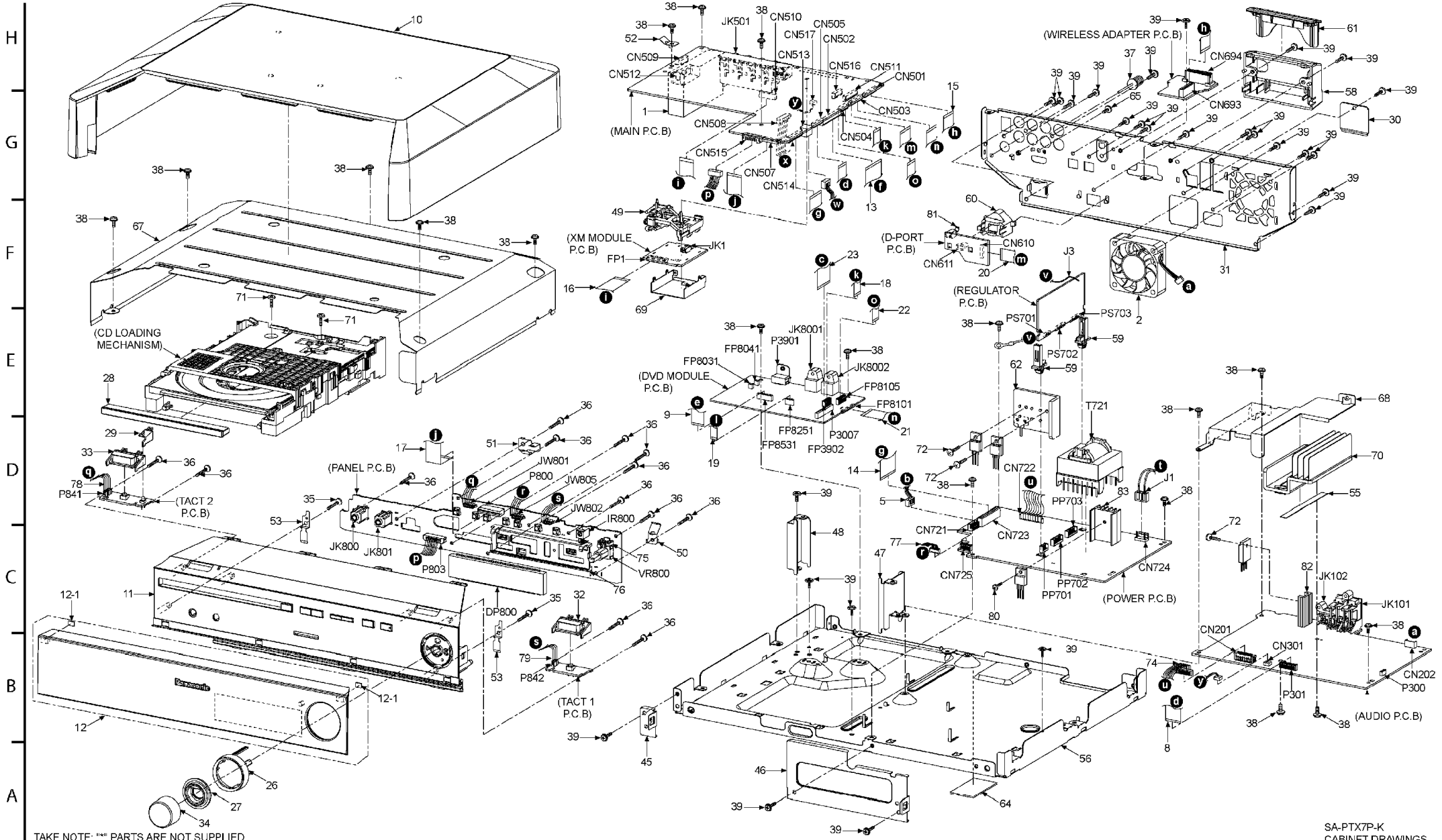
25.7. IC3201 (C1AB00002259): IC Video Encoder

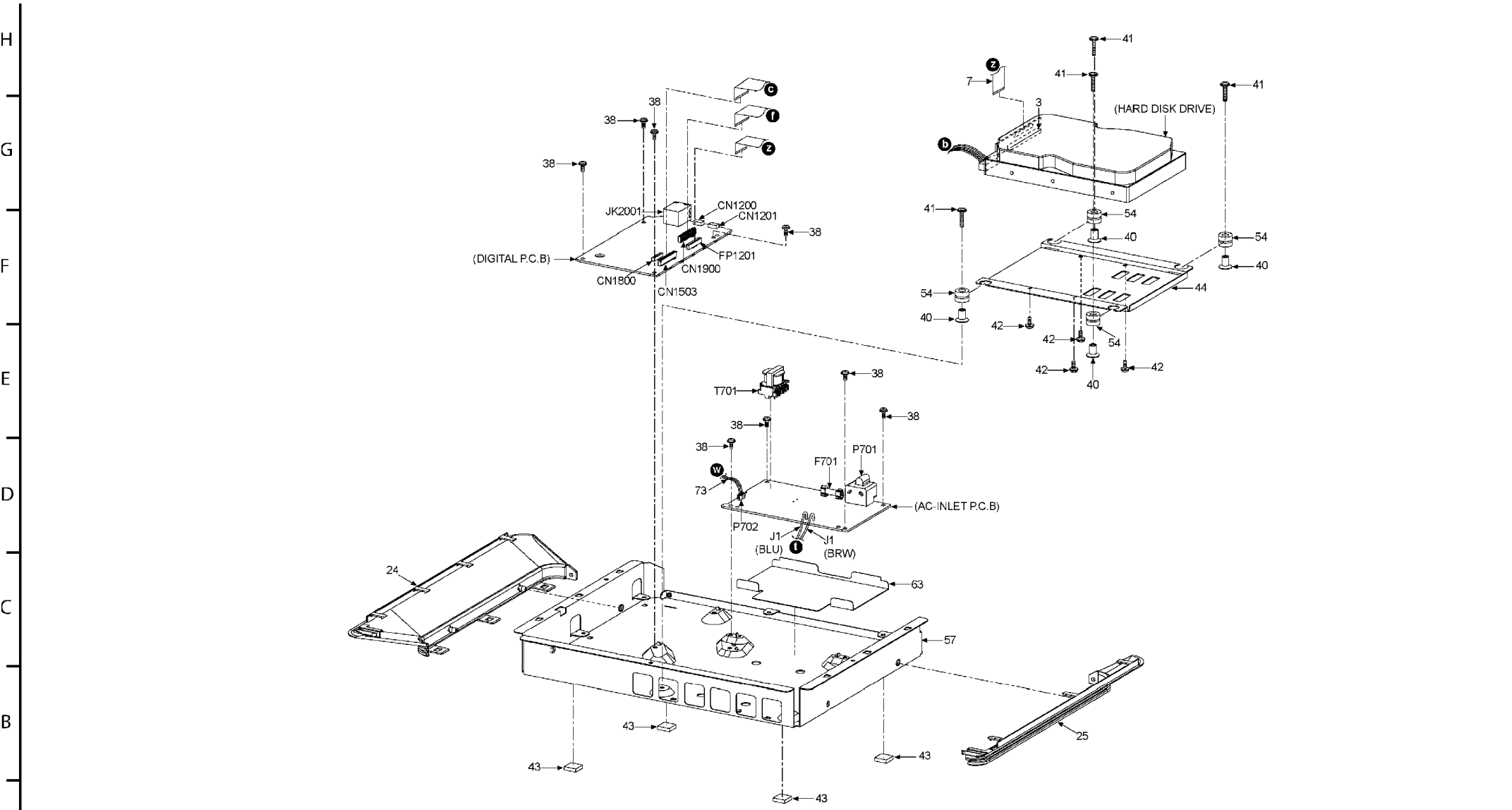
Pin No.	Terminal Name	I/O	Function
1	VDD_IO	-	Power Supply for Digital I/O
2	Y0	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
3	Y1	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
4	Y2	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
5	Y3	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
6	Y4	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
7	Y5	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
8	Y6	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
9	Y7	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
10	VDD	-	Digital Power Supply
11	DGND	-	Digital Ground
12	Y8	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
13	Y9	I	SD or Progressive Scan/HDTV Input Port for Y Data. Input Port for Interleave Progressive Scan Data
14	C0	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
15	C1	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
16	C2	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
17	C3	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
18	C4	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
19	I2C	I	I2C Interface Port. Pull to VDD_IO
20	ALSB	I	”TTL Address Input for the I2C Address. At LOW
21	SDA	I/O	I2C Port Serial Data INPUT/OUTPUT
22	SCLK	I	I2C Port Serial Interface CLOCK INPUT
23	NP_ HSYNC	I	Video Horizontal SYNC Control Signal
24	NP_ VSYNC	I	Video Vertical SYNC Control Signal
25	NP_ BLANK	I	Video Blanking Control Signal
26	C5	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
27	C6	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
28	C7	I	PROGRESSIVE SCAN / HDTV INPUT PORT 4:4:2 INPUT MODE. SETUP FOR Cb/[Blue/U] data.
29	C8	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
30	C9	I	Progressive Scan / HDTV Input Port 4:4:2 Input Mode. Setup for Cb/[Blue/U] data.
31	RTC_ SCR_ TR	I	Multifunctional Input / Real-Time Control (RTC) Input / Timing Reset Input / Subcarrier Reset Input
32	CLKIN_A	I	Pixel Clock Input A

Pin No.	Terminal Name	I/O	Function
33	NRESET	I	On-Chip Timing Generator Reset. (Active Low Signal)
34	EXT_LF	I	External Lopp Filter for Internal PLL
35	RSET2	I	DAC Output Amplitude Control 2
36	COMP2	O	Compensation Terminal 2 for DAC
37	DAC F	O	IN SD ONLY MODE: CHROMA / RED/V ANALOG OUTPUT; IN HD ONLY MODE AND SIMULTANEOUS HD/SD MODE: Pb/Blue[HD] ANALOG OUTPUT
38	DAC E	O	In SD only Mode: LUMA / BLUE/U ANALOG OUTPUT; in HD only Mode and Simultaneous HD/SD MODE: Pb/RED ANALOG OUTPUT
39	DAC D	O	In SD only Mode: CVBS / GREEN /Y ANALOG OUTPUT; in HD only Mode and Simultaneous HD/SD MODE: Y/GREEN[HD] ANALOG OUTPUT
40	AGND	-	Analog Ground
41	VAA	-	Analog Power SupplyY
42	DAC C	O	LUMA / RED / V/Pr Analog Output
43	DAC B	O	CHROMA / BLUE / U / Pb Analog Output
44	DAC A	O	CVBS / GREEN / Y/Y Analog Output
45	COMP1	O	Compensation Terminal 1 for DAC
46	VREF	-	VOLTAGE SUPPLY
47	RSET1	I	DAC Output AMPLTITUDE CONTROL 1
48	NS_ BLANK	I/O	VIDEO BLANKING Control Signal for SD
49	NS_ VSYNC	I/O	VIDEO VERTICAL SYNC Control for SD
50	NS_ HSYNC	I/O	VIDEO HORIZONTAL SYNC Control for SD
51	S0	I	SD/Progressive SCAN/HDTV Input Port 0. LSB SETUP on PIN S0
52	S1	I	SD/Progressive SCAN/HDTV INPUT PORT 1. For 8BIT DATA
53	S2	I	SD/Progressive SCAN/HDTV INPUT PORT 2
54	S3	I	SD/Progressive SCAN/HDTV INPUT PORT 3
55	S4	I	SD/Progressive SCAN/HDTV INPUT PORT 4
56	VDD	-	DIGITAL POWER SUPPLY
57	DGND	-	DIGITAL GROUND
58	S5	I	SD/Progressive SCAN/HDTV INPUT PORT 5
59	S6	I	SD/Progressive SCAN/HDTV INPUT PORT 6
60	S7	I	SD/Progressive SCAN/HDTV INPUT PORT 7
61	S8	I	SD/Progressive SCAN/HDTV INPUT PORT 8
62	S9	I	SD/Progressive SCAN/HDTV INPUT PORT 9
63	CLKIN_ B	I	PIXEL CLOCK INPUT B
64	GND_ O	-	DIGITAL INPUT/OUTPUT GROUND

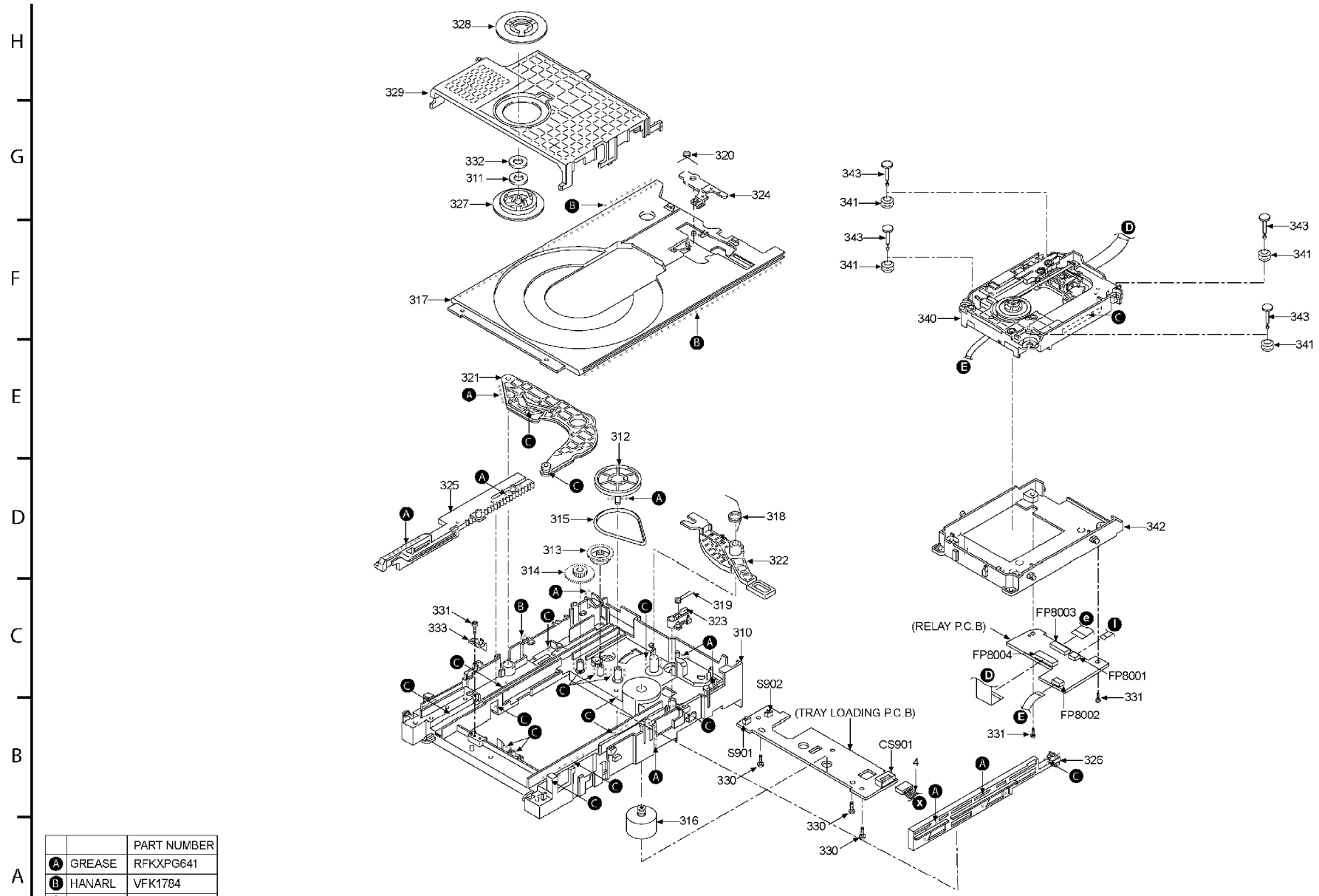
26 Exploded Views

26.1. Cabinet Parts Location





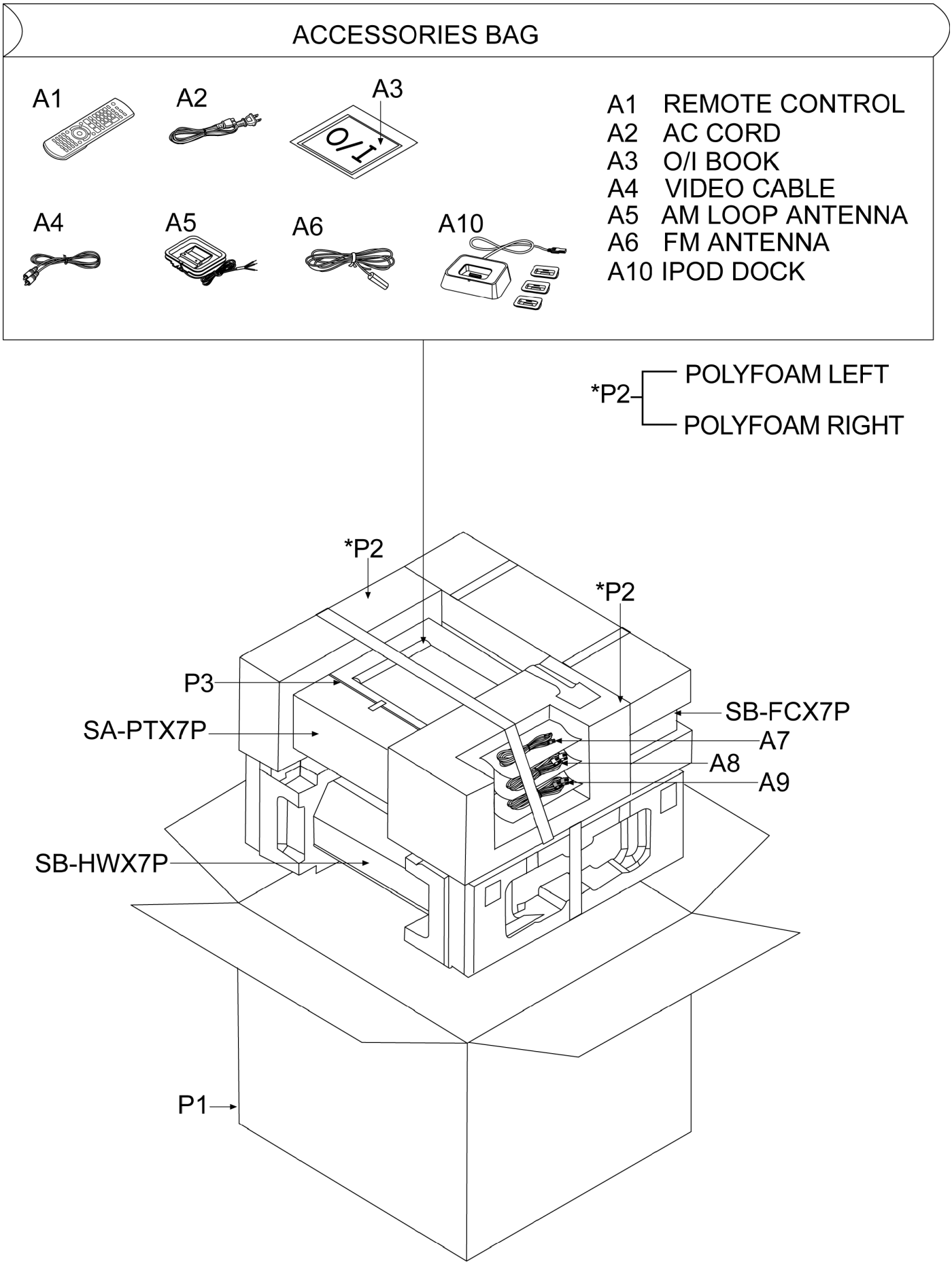
SA-PTX7P-K
CABINET DRAWINGS



		PART NUMBER
A	GREASE	RFKXPG641
B	HANARL	VFK1784
C	DRYSURF	RFKXGUD24

SA-PTX7P-K
CD LOADING MECHANISM DRAWINGS

26.2. Packaging



SC-PTX7P-K
PACKAGING DRAWINGS

27 Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ mark have special characteristics important for safety purpose.

  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

  When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
- Warning: This product uses a laser diode. Refer to caution statements.
- Capacity values are in microfarads (µF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM).
- The parenthesized indications in the Remarks columns specify the model names and areas. (Refer to the cover page)
- The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
- Parts mentioned [M] are supplied from PAVCSG.
- Parts mentioned [SPG] are supplied from PAVC.
- Reference for O/I book languages are as follows:

Ar:	Arablic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn	Simplified Chinese
Pe:	Persian	Ur:	Ukrainian	Pr:	Portuguese		

27.1. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	J3CCBB000007	TUNER PACK	[M]
2	L6FAJCCH0007	DC FAN MOTOR	[M]
3	N5EZZ0000003	CIRCUIT UNIT INTERFACE P.C.B.	[M]
4	REX1266	7P WIRE (MAIN-TRAY)	[M]
5	REX1268	4P WIRE (HDD-POWER)	[M]
7	REZ1812	40P FFC (DIGITAL-HDD)	[M]
8	REZ1813	30P FFC (MAIN-AUDIO)	[M]
9	REZ1814	26P FFC (DVD-RELAY)	[M]
10	RFKNAPTX7P-K	TOP COVER ASS´Y	[M]
11	RFKGAPTX7P-K	FRONT PANEL ASS´Y	[M]
12	RYF0815-K1	PANEL LID ASS´Y	[M]
12-1	RMGX0046	CUSHION LID	[M]
13	REZ1816	28P FFC (MAIN-DIG)	[M]
14	REZ1817	24P FFC (MAIN-POWER)	[M]
15	REZ1818	19P FFC (MAIN-WIRELESS)	[M]
16	REZ1819	17P FFC (MAIN-XM)	[M]
17	REZ1820	16P FFC (MAIN-PANEL)	[M]
18	REZ1821	10P FFC (MAIN-DVD)	[M]
19	REZ1822	6P FFC (DVD-RELAY)	[M]
20	REZ1828	14P FFC (MAIN-D-PORT)	[M]
21	REZ1839	40P FFC (MAIN-DVD)	[M]
22	REZ1840	12P FFC (MAIN-DVD)	[M]
23	REZ1847	50P FFC (DIGITAL-DVD)	[M]
24	RGK2075-K1	SIDE PLATE L	[M]
25	RGK2076-K1	SIDE PLATE R	[M]
26	RGKX0388-K	VOLUME RING ORNAMENT	[M]
27	RGKX0389-Q	VOLUME LIGHTING RING	[M]
28	RGKX0390-K	TRAY LID	[M]
29	RGL0707-Q	PANEL LIGHT GUIDE	[M]
30	RGQ0484-K	FUSE PLATE	[M]
31	RGR0375A-A3	REAR PANEL	[M]
32	RGU2532A-K	RECORD BUTTON	[M]
33	RGU2532-K	POWER BUTTON	[M]
34	RGWX0107-K	VOLUME KNOB	[M]
35	RHD26045	SCREW	[M]
36	RHD26046	SCREW	[M]
37	RHD30070	EARTH TERMINAL	[M]
38	RHD30111-3	SCREW	[M]
39	RHD30119-S	SCREW	[M]
40	RHD30150	SCREW	[M]
41	RHD30154	SCREW	[M]
42	RHD32001	SCREW	[M]
43	RKA0059-K	LEG RUBBER	[M]
44	RMA2054	HDD ANGLE	[M]
45	RMA2056	PANEL ANGLE L	[M]
46	RMA2057	PANEL ANGLE R	[M]
47	RMA2061	PCB ANGLE	[M]
48	RMA2070	PCB ANGLE L	[M]
49	RMAX1113A	XM PCB CHASSIS	[M]
50	RMC0718	VR EARTH SPRING	[M]
51	RMC0720	HP EARTH SPRING	[M]
52	RMC0722	TUNER EARTH SPRING	[M]
53	RMCX0038	SPRING PLATE	[M]
54	RMG0711-K	HDD DAMPER	[M]
55	RMG0725-K	RADIATION RUBBER	[M]
56	RMK0683-1	BOTTOM CHASSIS	[M]
57	RMK0684	BOTTOM BASE	[M]
58	RMKX0127-K	TRANSMITTER CHASSIS	[M]
59	RMN0203	PCB HOLDER	[M]
60	RMNX0231-1	D-PORT COVER	[M]
61	RMVX0109-K1	TRANSMITTER COVER	[M]
62	RXXX0094	REGULATOR HEATSINK UNIT	[M]
63	RMZ0904	ISOLATOR SHEET	[M]
64	RMZ0915	TRANS ISOLATOR	[M]
65	XSN3+4FJ	HDMI SCREW	[M]
67	RSC0806	TOP SHIELD	[M]
68	RSC0808	VIDEO SHIELD	[M]
69	RSCX0153-2	XM SHIELD PLATE	[M]
70	RXX0312	HEAT SINK UNIT	[M]
71	XTB3+10JFJ	SCREW	[M]
72	XTB3+8JFJ	SCREW	[M]
73	REX1263	4P WIRE (MAIN-AC-INLET)	[M]
74	REX1261	12P FL WIRE (POWER-AUDIO)	[M]
75	RMNX0151	LED HOLDER	[M]
76	RMNX0149	FL HOLDER	[M]
77	REX1267	4P WIRE (POWER-PANEL)	[M]
78	REX1262	5P WIRE (PANEL-TACT-2)	[M]
79	REX1264	3P WIRE (PANEL-TACT-1)	[M]
80	XYN3+F8FJ	SCREW	[M]
81	RMCX0047	IPOD GROUND SPRING	[M]
82	RMY0373	HEATSINK (S2)	[M]
83	RMY0372	HEATSINK (S)	[M]
		TRAVERSE DECK	
310	RMK0591A	MECHA CHASSIS	[M]
311	RHM0003-J	MAGNET	[M]
312	RDG0547	PULLEY GEAR	[M]
313	RDG0548-1	RELAY GEAR	[M]
314	RDG0549	DRIVE GEAR	[M]
315	RDV0070	BELT	[M]
316	REM0133	MOTOR UNIT	[M]
317	RGQ0395-K1	TRAY	[M]
318	RME0350	CHANGE LEVER SPRING	[M]
319	RME0351	LOCK LEVER SPRING	[M]
320	RME0353	TRAY SLIDER SPRING	[M]
321	RML0627-2	DRIVE ARM	[M]
322	RML0628	CHANGE LEVER	[M]
323	RML0629	LOCK LEVER	[M]
324	RML0631	TRAY SLIDER	[M]
325	RMM0247-3	DRIVE RACK	[M]
326	RMM0248	SUB RACK	[M]
327	RMR1446-X	CLAMPER	[M]
328	RMR1447-X	MAGNET HOLDER	[M]
329	RMR1468-K	CLAMP PLATE	[M]
330	XTN26+6GFJ	SCREW	[M]
331	XTV2+6GFJ	SCREW	[M]
332	XWG6FFJ	WASHER	[M]
333	RMC0387	SUPPORT SPRING	[M]
340	RAE2025Z-S	TRAVERSE UNIT	[M] ⚠
341	RMG0598A-K	FLOATING RUBBER	[M]
342	RMR1596-X2	MIDDLE CHASSIS	[M]
343	RMS0789	FIXED PIN	[M]
		PRINTED CIRCUIT BOARDS	
	REP4235A	DVD MODULE P.C.B.	[M] (RTL)
	REPX0590A	XM MODULE P.C.B.	[M] (RTL)
	REP4234A	MAIN/WIRELESS ADAPTER/D-PORT P.C.B.	[M] (RTL)
	REP4233A	POWER/REGULATOR/AC-INLET/PANEL/TACT-1 /TACT-2 P.C.B.	[M] (RTL)
	REP4232A	AUDIO (DSP/D-AMP) P.C.B.	[M] (RTL)
	REP4236A	DIGITAL P.C.B.	[M] (RTL)
	REPX0604A	RELAY P.C.B.	[M] (RTL)
	REP4238A	TRAY LOADING MOTOR P.C.B.	[M] (RTL)
	RFKV0097HDK	HARD DISK DRIVE	[M] (RTL)
		INTEGRATED CIRCUITS	
IC1	C1AB00002670	IC XM SAT RADIO DRIVER	[M]
IC2	C0DBZYE00002	IC POWER SUPPLY	[M]
IC3	C0FBBY000027	IC 2CH D-A CONVERTER	[M]
IC102	C1AB00002460	IC AUDIO DIGITAL AMP	[M]
IC103	C1AB00002460	IC AUDIO DIGITAL AMP	[M]
IC104	C1AB00002460	IC AUDIO DIGITAL AMP	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC105	C1AB00002461	IC DIGITAL AUDIO PWM PROCESSOR	[M]
IC106	C0JBAA000501	IC AND GATE	[M]
IC107	C0DAEMZ00001	IC SHUNT REGULATOR	[M]
IC108	C0EBE0000456	IC RESET	[M]
IC151	C0JBAB000837	IC INVERTER	[M]
IC152	C0JBAB000837	IC INVERTER	[M]
IC300	C0FBAY000032	IC A/D CONVERTER	[M]
IC301	C0FBAY000032	IC A/D CONVERTER	[M]
IC302	C0FBAY000032	IC A/D CONVERTER	[M]
IC303	C0FBAY000032	IC A/D CONVERTER	[M]
IC305	RFKWERE005PA	IC FLASH ROM	[M]
IC306	C2HBZY000024	IC DSP	[M]
IC308	C3ABMG000228	IC 16M SDRAM	[M]
IC310	C0JBAA000501	IC AND GATE	[M]
IC311	C0FBBK000049	IC AUDIO D/A CONVERTER	[M]
IC312	C0JBAB000661	IC INVERTER	[M]
IC405	C0DBAKG00007	IC +1.2V DC - DC CONVERTER	[M]
IC501	RFKWERE006PA	IC SYSTEM CONTROL	[M]
IC502	C0EBE0000242	IC RESET	[M]
IC504	C0ABCB000038	IC MUSIC PORT & IPOD AMP	[M]
IC505	C0ABBB000403	IC DVD MIX AMP	[M]
IC506	C0ABBB000403	IC DVD FL AMP	[M]
IC507	C0ABBB000403	IC DVD SL AMP	[M]
IC508	C0ABBB000403	IC DVD SW AMP	[M]
IC509	C0AABB000085	IC HEADPHONE AMP	[M]
IC510	C1AB00002750	IC 9CH FUNCTION SWITCH	[M]
IC511	C0ZBZ0001508	IC IIC BUS TO EXPANDER	[M]
IC514	C9ZB00000498	IC VIDEO BUFFER	[M]
IC518	C0ABBB000403	IC CLIP DETECT	[M]
IC519	C0DBZYE00002	IC REGULATOR	[M]
IC520	C0DBZYE00002	IC REGULATOR	[M]
IC701	MIP2F20MSSCF	IC SWITCHING REGULATOR	[M]
IC702	C0DAEMZ00001	IC SHUNT REGULATOR	[M]
IC703	C0CBABC00117	IC +3.3V REGULATOR	[M]
IC704	C0DBAZZ00093	IC POWER SUPPLY CONTROL	[M]
IC705	C0DBAZZ00093	IC POWER SUPPLY CONTROL	[M]
IC706	C0DBAZZ00093	IC POWER SUPPLY CONTROL	[M]
IC722	C0DBZHG00047	IC +9V REGULATOR	[M]
IC723	C0DBZHG00047	IC +9V REGULATOR	[M]
IC725	C0DAAMH00013	IC SWITCHING REGUALTOR	[M]
IC726	C0EBJ0000331	IC AC DETECT	[M]
IC727	C0DAEMZ00001	IC SHUNT REGULATOR	[M]
IC800	C0HBB0000057	IC DISPLAY DRIVER	[M]
IC904	C0GAY0000013	IC REFLECTIVE PHOTO SENSOR	[M]
IC1101	C1CB00002054	IC LAN (ETHERMET CONTROLLER)	[M]
IC1200	C1DB00001549	IC LINK/TRANSACTION CONTROLLER	[M]
IC1201	C0CBCAD00039	IC REGULATOR	[M]
IC1300	C3ABQG000105	IC SD RAM	[M]
IC1301	C3ABQG000105	IC SD RAM	[M]
IC1400	RFKWERF008PA	IC FLASH ROM (64M)	[M]
IC1502	C2GBC0000300	IC MICROCOMPUTER	[M]
IC1504	C0EBE0000242	IC RESET	[M]
IC1505	C0JBAU000024	IC SCHMITT BUFFER	[M]
IC1506	C0JBAA000494	IC AND GATE	[M]
IC1507	C0CBAAG00018	IC +1.5V REGULATOR	[M]
IC1702	C0JBAA000495	IC AND GATE	[M]
IC1703	C0JBAB000837	IC INVERTER	[M]
IC1704	C0JBAE000438	IC OR GATE	[M]
IC1705	C0JBAF000707	IC FLIP-FLOP	[M]
IC1706	C0JBAF000707	IC FLIP-FLOP	[M]
IC1707	C0JBAF000707	IC FLIP-FLOP	[M]
IC1708	C0JBAK000277	IC 4-BIT COUNTER	[M]
IC1709	C0JBAE000309	IC OR GATE	[M]
IC1710	C0JBAE000438	IC OR GATE	[M]
IC1711	C0JBAF000707	IC FLIP-FLOP	[M]
IC1712	C0JBAE000438	IC FLIP-FLOP	[M]
IC1800	MN677382FV	IC SUB MICROPROCESSOR	[M]
IC1801	C0CBCYY00002	IC REGULATOR	[M]
IC1900	C0JBAA000494	IC AND GATE	[M]
IC1901	C0JBAR000434	IC 2 - CH MULTIPLEXER	[M]
IC1902	C0FBBK000049	IC 2 - CH AUDIO D/A CONVERTER	[M]
IC1903	C0FBAK000026	IC 2 - CH AUDIO A/D CONVERTER	[M]
IC1904	C0JBAB000837	IC INVERTER	[M]
IC1905	C0JBAR000434	IC 2 - CH MULTIPLEXER	[M]
IC1906	C0JBAZ002262	IC 3 - STATE BUFFER	[M]
IC1907	C0JBAZ000851	IC BUS BUFFER	[M]
IC1918	C0JBAB000884	IC SCHMITT INVERTER	[M]
IC1920	C0JBAR000434	IC 2 - CH MULTIPLEXER	[M]
IC3000	C1ZBZ0003207	IC FIELD PROGRAMMABLE GATE ARRAY	[M]
IC3201	C1AB00002259	IC VIDEO ENCODER	[M]
IC3251	C0JBAS000081	IC VIDEO SELECTOR	[M]
IC3252	C0JBAS000081	IC VIDEO SELECTOR	[M]
IC3291	C0CBCAG00016	IC REGULATOR	[M]
IC3901	MN864702	IC HDMI TRANSMITTER	[M]
IC3952	C0DBAHD00013	IC TERMINAL VOLTAGE REGULATOR	[M]
IC8001	MN2DS0018DA	IC DV5.0 LSI	[M]
IC8051	C3ABPG000145	IC 64M SDRAM	[M]
IC8111	C0DBZYY00018	IC +3.3V DC-DC CONVERTER	[M]
IC8151	C0DBEHG00006	IC +1.2V REGULATOR	[M]
IC8251	C0GBG0000048	IC MOTOR DRIVE	[M]
IC8421	C0FBBK000050	IC AUDIO DAC	[M]
IC8601	C0EBA0000029	IC RESET	[M]
IC8606	C0EBE0000456	IC RESET	[M]
IC8611	RFKWENJ007PA	IC EEPROM	[M]
IC8651	C3FBND000289	IC FLASH ROM	[SPG]
IC8701	C0JBAB000907	IC INVERTER	[M]
IC8901	C0JBAA000344	IC AND GATE	[M]
IC8902	C0JBAA000344	IC AND GATE	[M]
IC9001	C0JBAZ001251	IC LATCH	[M]
IC9002	C0JBAZ001251	IC LATCH	[M]
IC9006	C0GBA0000002	IC SERIAL IN PARALLEL OUT DRIVER	[M]
		TRANSISTORS	
Q101	B1ABCF000011	TRANSISTOR	[M]
Q102	B1ABCF000011	TRANSISTOR	[M]
Q103	B1ABCF000011	TRANSISTOR	[M]
Q104	B1ABCF000011	TRANSISTOR	[M]
Q105	B1ABCF000011	TRANSISTOR	[M]
Q106	B1ABCF000011	TRANSISTOR	[M]
Q107	B1ADBL000010	TRANSISTOR	[M]
Q108	B1ABCF000011	TRANSISTOR	[M]
Q109	B1ABCF000011	TRANSISTOR	[M]
Q110	B1ABCF000011	TRANSISTOR	[M]
Q111	B1BACG000048	TRANSISTOR	[M]
Q112	B1ABCF000011	TRANSISTOR	[M]
Q113	B1BACG000048	TRANSISTOR	[M]
Q114	B1ABCF000011	TRANSISTOR	[M]
Q115	B1ADCF000001	TRANSISTOR	[M]
Q300	B1ADCF000001	TRANSISTOR	[M]
Q305	B1ABCF000011	TRANSISTOR	[M]
Q405	B1DHDD000029	TRANSISTOR	[M]
Q500	B1ADCF000001	TRANSISTOR	[M]
Q501	2SD0601AHL	TRANSISTOR	[M]
Q502	2SD0601AHL	TRANSISTOR	[M]
Q503	B1GFGCAA0001	TRANSISTOR	[M]
Q504	B1GFGCAA0001	TRANSISTOR	[M]
Q505	B1GFGCAA0001	TRANSISTOR	[M]
Q506	2SD0601AHL	TRANSISTOR	[M]
Q512	B1ABCF000176	TRANSISTOR	[M]
Q513	B1ABCF000176	TRANSISTOR	[M]
Q514	B1ABCF000176	TRANSISTOR	[M]
Q515	B1ABCF000176	TRANSISTOR	[M]
Q516	B1ABCF000176	TRANSISTOR	[M]
Q517	B1ABCF000176	TRANSISTOR	[M]
Q520	B1GFGCAA0001	TRANSISTOR	[M]
Q521	B1ADCF000001	TRANSISTOR	[M]
Q522	B1ADCF000001	TRANSISTOR	[M]
Q550	B1ABCF000176	TRANSISTOR	[M]
Q560	B1ADCE000012	TRANSISTOR	[M]
Q561	B1ADCF000001	TRANSISTOR	[M]
Q562	B1GFGCAA0001	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q563	B1ADCF000001	TRANSISTOR	[M]
Q566	B1DHDC000027	TRANSISTOR	[M]
Q567	B1DHDC000027	TRANSISTOR	[M]
Q568	B1DHDC000027	TRANSISTOR	[M]
Q569	B1DHDC000027	TRANSISTOR	[M]
Q701	B1ABCF000011	TRANSISTOR	[M]
Q702	B1DDCC000009	TRANSISTOR	[M]
Q703	B1DDCC000009	TRANSISTOR	[M]
Q704	B1DDCC000009	TRANSISTOR	[M]
Q721	2SC3940ARA	TRANSISTOR	[M]
Q722	2SB0621AHA	TRANSISTOR	[M]
Q723	B1ADCF000001	TRANSISTOR	[M]
Q724	2SC3940ARA	TRANSISTOR	[M]
Q725	B1ABCF000011	TRANSISTOR	[M]
Q727	B1BABK000001	TRANSISTOR	[M]
Q728	B1ABCF000011	TRANSISTOR	[M]
Q729	B1DHDC000027	TRANSISTOR	[M]
Q800	B1GBCFGN0018	TRANSISTOR	[M]
Q841	B1GBCFGN0018	TRANSISTOR	[M]
Q3211	2SB1218ARL	TRANSISTOR	[M]
Q3216	2SB1218ARL	TRANSISTOR	[M]
Q3221	2SB1218ARL	TRANSISTOR	[M]
Q3231	2SB1218ARL	TRANSISTOR	[M]
Q3235	2SB1218ARL	TRANSISTOR	[M]
Q3239	2SB1218ARL	TRANSISTOR	[M]
Q3901	2SD1819A0L	TRANSISTOR	[M]
Q3902	B1CFHA000002	TRANSISTOR	[M]
Q3903	B1CFHA000002	TRANSISTOR	[M]
Q3941	2SD1819A0L	TRANSISTOR	[M]
Q3942	2SD1819A0L	TRANSISTOR	[M]
Q8321	2SB1218ARL	TRANSISTOR	[M]
Q8325	2SB1218ARL	TRANSISTOR	[M]
Q8331	2SB1218ARL	TRANSISTOR	[M]
Q8335	2SB1218ARL	TRANSISTOR	[M]
Q8341	2SB1218ARL	TRANSISTOR	[M]
Q8551	B1ABDF000018	TRANSISTOR	[M]
Q8552	2SB09700RL	TRANSISTOR	[M]
Q8561	B1ABDF000018	TRANSISTOR	[M]
Q8562	2SB09700RL	TRANSISTOR	[M]
QR305	B1GBCFJJ0051	TRANSISTOR	[M]
QR501	B1GFAFNN0001	TRANSISTOR	[M]
QR502	B1GFAFNN0001	TRANSISTOR	[M]
QR503	B1GBCFJN0033	TRANSISTOR	[M]
QR504	B1GDCFJA0001	TRANSISTOR	[M]
QR506	B1GDCFJA0001	TRANSISTOR	[M]
QR507	B1GBCFJJ0051	TRANSISTOR	[M]
QR512	B1GBCFJJ0051	TRANSISTOR	[M]
QR513	B1GBCFJJ0051	TRANSISTOR	[M]
QR514	B1GBCFJJ0051	TRANSISTOR	[M]
QR515	B1GBCFJJ0051	TRANSISTOR	[M]
QR516	B1GBCFJJ0051	TRANSISTOR	[M]
QR721	B1GBCFJJ0051	TRANSISTOR	[M]
QR722	B1GBCFJJ0051	TRANSISTOR	[M]
QR725	B1GBCFJJ0051	TRANSISTOR	[M]
QR726	B1GBCFJJ0051	TRANSISTOR	[M]
QR727	B1GBCFJJ0051	TRANSISTOR	[M]
QR730	B1GBCFGG0030	TRANSISTOR	[M]
QR732	B1ABCF000011	CHIP TRANSISTOR	[M]
QR733	B1GBCFJJ0051	TRANSISTOR	[M]
QR734	B1GBCFGG0030	TRANSISTOR	[M]
QR735	B1GBCFJJ0051	TRANSISTOR	[M]
QR3261	UNR521200L	CHIP TRANSISTOR	[M]
QR3271	UNR521200L	CHIP TRANSISTOR	[M]
QR8111	XP0621400L	CHIP TRANSISTOR	[M]
QR8420	B1GBCFJJ0047	CHIP TRANSISTOR	[M]
QR8571	B1GDCFEC0001	CHIP TRANSISTOR	[M]
PC701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC721	B3PBA0000402	PHOTO COUPLER	[M] ⚠
		DIODES	

Ref. No.	Part No.	Part Name & Description	Remarks
D1	MA2J72800L	DIODE	[M]
D101	B0ACCK000005	DIODE	[M]
D102	B0ACCK000005	DIODE	[M]
D104	B0ACCK000005	DIODE	[M]
D105	B0BC010A0007	DIODE	[M]
D106	B0ECKP000002	DIODE	[M]
D107	B0ECKP000002	DIODE	[M]
D108	B0JCDD000002	DIODE	[M]
D304	B0BC2R4A0006	DIODE	[M]
D305	B0BC5R000009	DIODE	[M]
D405	B0JCPD000021	DIODE	[M]
D500	B0ACCK000005	DIODE	[M]
D501	B0BC5R000009	DIODE	[M]
D502	B0ECKM000016	DIODE	[M]
D503	B0ECKM000016	DIODE	[M]
D504	B0ACCK000005	DIODE	[M]
D505	B0ACCK000005	DIODE	[M]
D509	B0JCPE000003	DIODE	[M]
D701	B0ACCK000005	DIODE	[M]
D702	B0EDKT000009	DIODE	[M]
D703	B0EAKB000004	DIODE	[M]
D704	B0HAJM000005	DIODE	[M]
D705	B0JAMG000011	DIODE	[M]
D706	B0ACCK000005	DIODE	[M]
D707	B0JAMG000011	DIODE	[M]
D721	MAZ80750ML	DIODE	[M]
D722	B0JCPE000003	DIODE	[M]
D723	B0EAKM000117	DIODE	[M]
D724	B0EFNP000002	DIODE	[M]
D725	B0HBSM000052	DIODE	[M]
D726	B0ZAZ0000052	DIODE	[M]
D727	B0HAJM000005	DIODE	[M]
D728	B0HAJM000005	DIODE	[M]
D729	MAZ81300HL	DIODE	[M]
D730	B0HAJM000005	DIODE	[M]
D731	MAZ81800ML	DIODE	[M]
D732	B0ACCK000005	DIODE	[M]
D733	MAZ80620ML	DIODE	[M]
D734	MAZ83000ML	DIODE	[M]
D736	B0JAMG000011	DIODE	[M]
D738	MAZ81100HL	DIODE	[M]
D739	B0BC01700015	DIODE	[M]
D740	B0JCMD000010	DIODE	[M]
D741	B0HAJM000005	DIODE	[M]
D742	MAZ81100HL	DIODE	[M]
D743	MAZ82700LL	DIODE	[M]
D744	B0BC01700015	DIODE	[M]
D745	B0JCPE000003	DIODE	[M]
D746	B0JCPE000003	DIODE	[M]
D747	B0ECKM000016	DIODE	[M]
D749	B0ACCK000005	DIODE	[M]
D750	B0ACCK000005	DIODE	[M]
D751	B0ACCK000005	DIODE	[M]
D752	B0ACCK000005	DIODE	[M]
D753	B0ACCK000005	DIODE	[M]
D754	B0ACCK000005	DIODE	[M]
D758	B0HBSM000043	DIODE	[M]
D759	MAZ80680ML	DIODE	[M]
D760	MAZ81000HL	DIODE	[M]
D761	MAZ81000HL	DIODE	[M]
D762	MAZ81000HL	DIODE	[M]
D763	MAZ81300HL	DIODE	[M]
D764	MAZ80680ML	DIODE	[M]
D801	B3AEA0000058	DIODE	[M]
D841	B3AAA0000489	DIODE	[M]
D1200	B0ACCK000005	DIODE	[M]
D1600	MA2Q73800L	DIODE	[M]
D1601	B0ACCK000005	DIODE	[M]
D1800	B0ACCK000005	DIODE	[M]
D3201	B0HCMM000013	DIODE	[M]
D3202	B0HCMM000013	DIODE	[M]
D3901	MA2J72800L	DIODE	[M]
D3902	MAZ80390LL	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D8211	MA2J11100L	DIODE	[M]
D8571	MA2J72800L	DIODE	[M]
D9111	B0HCMM000013	DIODE	[M]
DP800	A2BB00000164	FL DISPLAY	[M]
		SWITCHES	
S800	EVQ21405R	SW POWER	[M]
S801	EVQ21405R	SW OPEN/CLOSE	[M]
S802	EVQ21405R	SW SELECTOR <	[M]
S803	EVQ21405R	SW SELECTOR >	[M]
S804	EVQ21405R	SW R. SKIP	[M]
S805	EVQ21405R	SW F. SKIP	[M]
S806	EVQ21405R	SW STOP	[M]
S807	EVQ21405R	SW PLAY	[M]
S808	EVQ21405R	SW REC	[M]
S901	RSH1A044-1A	SW PLAY	[M]
S902	RSH1A044-1A	SW OPEN	[M]
		CONNECTORS	
CN201	K1MP12A00009	12P CONNECTOR	[M]
CN202	K1KA03AA0301	3P CONNECTOR	[M]
CN301	K1KA02AA0193	2P CONNECTOR	[M]
CN501	K1MN19AA0004	19P CONNECTOR	[M]
CN502	K1MN28AA0076	28P CONNECTOR	[M]
CN503	K1MN40AA0082	40P CONNECTOR	[M]
CN504	K1MN10AA0003	10P CONNECTOR	[M]
CN505	K1MN30AA0082	30P CONNECTOR	[M]
CN507	K1MN16BA0005	16P CONNECTOR	[M]
CN508	K1MP07A00011	7P CONNECTOR	[M]
CN509	K1MN06AA0076	6P CONNECTOR	[M]
CN510	K1MN17AA0076	17P CONNECTOR	[M]
CN511	K1MN14AA0003	14P CONNECTOR	[M]
CN512	K1KA10AA0031	10P CONNECTOR	[M]
CN513	K1MP04A00003	4P CONNECTOR	[M]
CN514	K1MN24AA0004	24P CONNECTOR	[M]
CN515	K1KA08BA0061	8P CONNECTOR	[M]
CN516	K1MN12AA0003	12P CONNECTOR	[M]
CN517	REX1272	2P WIRE (DSP-MAIN)	[M]
CN610	K1MN14BA0004	14P CONNECTOR	[M]
CN611	K1FY124DA001	D-PORT CONNECTOR	[M]
CN693	K1MN19AA0004	19P CONNECTOR	[M]
CN694	K1MY22A00003	22P CONNECTOR	[M]
CN721	K1KA04AA0180	4P CONNECTOR	[M]
CN722	K1YZ12000001	12P WIRE HOLDER	[M]
CN723	K1MN24AA0004	24P CONNECTOR	[M]
CN724	K1KA02A00593	2P CONNECTOR	[M]
CN725	K1MP04A00003	4P WIRE CONNECTOR	[M]
CN1200	K1MN10BA0051	10P CONNECTOR (JIG)	[M]
CN1201	K1KA06BA0047	6P CONNECTOR (JIG)	[M]
CN1503	K1MN50AA0082	50P CONNECTOR	[M]
CN1800	K1MY16AA0021	16P CONNECTOR (SD)	[M]
CN1900	K1MN28AA0076	28P CONNECTOR	[M]
CS901	K1KA07BA0061	7P CONNECTOR	[M]
FP1	K1MN17BA0005	17P CONNECTOR	[M]
FP1201	K1MN40AA0082	40P CONNECTOR	[M]
FP3902	K1MN10AA0076	10P CONNECTOR	[M]
FP8001	K1MN06BA0147	6P CONNECTOR	[M]
FP8002	K1MN06BA0148	6P CONNECTOR	[M]
FP8003	K1MY26BA0053	26P CONNECTOR	[M]
FP8004	K1MY26BA0030	26P CONNECTOR	[M]
FP8031	K1MY10AA0021	10P CONNECTOR (PROGRAM)	[M]
FP8041	K1MY08AA0021	8P CONNECTOR (PROGRAM)	[M]
FP8101	K1MN40BA0173	40P CONNECTOR	[M]
FP8105	K1MN12AA0076	12P CONNECTOR	[M]
FP8251	K1MN06AA0076	6P CONNECTOR	[M]
FP8531	K1MY26AA0021	26P CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
P300	K1MY10AA0021	10P CONNECTOR	[M]
P301	K1MN30AA0082	30P CONNECTOR	[M]
P800	K1MN16AA0003	16P CONNECTOR	[M]
P803	REX1265	8P WIRE	[M]
P3007	K1MN50AA0082	50P CONNECTOR	[M]
PP701	K1KA04AA0031	4P CONNECTOR	[M]
PP702	K1KA07AA0031	7P CONNECTOR	[M]
PP703	K1KA07AA0031	7P CONNECTOR	[M]
PS701	K1KB04A00046	4P CONNECTOR	[M]
PS702	K1KB07A00018	7P CONNECTOR	[M]
PS703	K1KB07A00018	7P CONNECTOR	[M]
		THERMISTORS	
TH701	D4CAA5R10001	THERMISTOR	[M] ⚠
TH721	D4CAA5R10001	THERMISTOR	[M] ⚠
		COILS & TRANSFORMERS	
L101	G1C100M00045	INDUCTOR	[M]
L102	G1C100M00045	INDUCTOR	[M]
L103	G0B9R5K00003	INDUCTOR	[M]
L104	G0B9R5K00003	INDUCTOR	[M]
L105	G0B9R5K00003	INDUCTOR	[M]
L106	G0B9R5K00003	INDUCTOR	[M]
L107	G0B9R5K00003	INDUCTOR	[M]
L201	G1C100M00045	INDUCTOR	[M]
L202	G1C100M00045	INDUCTOR	[M]
L203	G1C100M00045	INDUCTOR	[M]
L204	G1C100M00045	INDUCTOR	[M]
L405	G1A220G00006	COIL	[M]
L502	G1C220KA0079	INDUCTOR	[M]
L503	G1C220KA0079	INDUCTOR	[M]
L701	ELF15N035AN	LINE FILTER	[M] ⚠
L702	ELF19H015A	CHOKE COIL	[M] ⚠
L703	G0A220GA0026	INDUCTOR	[M]
L704	G0A220GA0026	INDUCTOR	[M]
L721	G0A220GA0026	INDUCTOR	[M]
L722	G0A330ZA0028	CHOKE COIL	[M]
L724	G0C390JA0055	COIL	[M]
L725	G0A220GA0026	INDUCTOR	[M]
L726	G0A220GA0026	INDUCTOR	[M]
L727	G0A220GA0026	INDUCTOR	[M]
L728	G0A220GA0026	INDUCTOR	[M]
L729	G0A330ZA0028	CHOKE COIL	[M]
L730	G0A220GA0026	INDUCTOR	[M]
L731	G0A220GA0026	INDUCTOR	[M]
L732	G0A220GA0026	INDUCTOR	[M]
L733	G0A330ZA0028	CHOKE COIL	[M]
L734	G0A220GA0026	INDUCTOR	[M]
L735	G0A220GA0026	INDUCTOR	[M]
L736	G0A220GA0026	INDUCTOR	[M]
L737	G0A220GA0026	INDUCTOR	[M]
L738	G0A220GA0026	INDUCTOR	[M]
L739	G0A220GA0026	INDUCTOR	[M]
L740	G0A200D00002	COIL	[M]
L743	G0A200D00002	COIL	[M]
L831	J0JBC0000014	CHIP INDUCTOR	[M]
L832	J0JBC0000014	CHIP INDUCTOR	[M]
L833	J0JBC0000014	CHIP INDUCTOR	[M]
L834	J0JBC0000014	CHIP INDUCTOR	[M]
L835	J0JBC0000014	CHIP INDUCTOR	[M]
L836	J0JBC0000014	CHIP INDUCTOR	[M]
L1101	J0MAB0000170	FILTER	[M]
L1102	J0MAB0000170	FILTER	[M]
L1800	ELJPA100KFB	COIL	[M]
L3901	J0MAB0000170	FILTER	[M]
L3902	J0MAB0000170	FILTER	[M]
L3903	J0MAB0000170	FILTER	[M]
L3904	J0MAB0000170	FILTER	[M]
L8001	G1C100K00019	CHIP COIL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L8201	G1C100K00019	CHIP COIL	[M]
L8301	G1C100K00019	CHIP COIL	[M]
L8302	G1C100K00019	CHIP COIL	[M]
L8303	G1C100K00019	CHIP COIL	[M]
L8330	G1C100K00019	CHIP COIL	[M]
L8501	G1C100K00019	CHIP COIL	[M]
L8550	G1C100KA0055	CHIP INDUCTOR	[M]
		CHIP INDUCTORS	
LB1	J0JBC0000019	CHIP INDUCTOR	[M]
LB2	J0JHC0000107	INDUCTOR COIL	[M]
LB3	J0JBC0000014	CHIP INDUCTOR	[M]
LB4	J0JGC0000050	EMI FILTER	[M]
LB6	J0JHC0000107	INDUCTOR COIL	[M]
LB7	J0JHC0000107	INDUCTOR COIL	[M]
LB101	J0JBC0000041	CHIP INDUCTOR	[M]
LB102	J0JKB0000020	EMI BEAD CORE	[M] ⚠
LB103	J0JKB0000020	EMI BEAD CORE	[M] ⚠
LB201	J0JBC0000041	CHIP INDUCTOR	[M]
LB202	J0JBC0000041	CHIP INDUCTOR	[M]
LB203	J0JBC0000041	CHIP INDUCTOR	[M]
LB204	J0JBC0000041	CHIP INDUCTOR	[M]
LB300	J0JBC0000041	CHIP INDUCTOR	[M]
LB301	J0JBC0000041	CHIP INDUCTOR	[M]
LB302	J0JBC0000041	CHIP INDUCTOR	[M]
LB303	J0JBC0000041	CHIP INDUCTOR	[M]
LB304	J0JBC0000041	CHIP INDUCTOR	[M]
LB305	J0JBC0000041	CHIP INDUCTOR	[M]
LB306	J0JBC0000041	CHIP INDUCTOR	[M]
LB307	J0JBC0000041	CHIP INDUCTOR	[M]
LB308	J0JGC0000020	FILTER	[M]
LB309	J0JBC0000041	CHIP INDUCTOR	[M]
LB310	J0JBC0000041	CHIP INDUCTOR	[M]
LB311	J0JHC0000048	FILTER BEAD CORE	[M]
LB312	J0JHC0000048	FILTER BEAD CORE	[M]
LB313	J0JHC0000048	FILTER BEAD CORE	[M]
LB314	J0JHC0000048	FILTER BEAD CORE	[M]
LB315	J0JHC0000048	FILTER BEAD CORE	[M]
LB316	J0JHC0000048	FILTER BEAD CORE	[M]
LB317	J0JBC0000041	CHIP INDUCTOR	[M]
LB318	J0JGC0000020	FILTER	[M]
LB319	J0JGC0000020	FILTER	[M]
LB321	J0JGC0000020	FILTER	[M]
LB322	J0JBC0000041	CHIP INDUCTOR	[M]
LB323	J0JBC0000041	CHIP INDUCTOR	[M]
LB326	J0JHC0000048	FILTER BEAD CORE	[M]
LB327	J0JHC0000048	FILTER BEAD CORE	[M]
LB330	J0JHC0000048	FILTER BEAD CORE	[M]
LB405	J0JHC0000032	FILTER	[M]
LB406	J0JHC0000032	FILTER	[M]
LB407	J0JHC0000032	FILTER	[M]
LB500	J0JBC0000014	CHIP INDUCTOR	[M]
LB507	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB508	J0JCC0000186	CHIP BEADS	[M]
LB509	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB510	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB511	J0JBC0000014	CHIP INDUCTOR	[M]
LB512	J0JBC0000014	CHIP INDUCTOR	[M]
LB513	J0JBC0000014	CHIP INDUCTOR	[M]
LB514	J0JBC0000014	CHIP INDUCTOR	[M]
LB515	J0JBC0000014	CHIP INDUCTOR	[M]
LB516	J0JBC0000014	CHIP INDUCTOR	[M]
LB517	J0JBC0000014	CHIP INDUCTOR	[M]
LB518	J0JBC0000014	CHIP INDUCTOR	[M]
LB519	J0JBC0000014	CHIP INDUCTOR	[M]
LB520	J0JBC0000014	CHIP INDUCTOR	[M]
LB521	J0JBC0000014	CHIP INDUCTOR	[M]
LB522	J0JBC0000014	CHIP INDUCTOR	[M]
LB523	J0JBC0000014	CHIP INDUCTOR	[M]
LB524	J0JBC0000014	CHIP INDUCTOR	[M]
LB525	J0JBC0000014	CHIP INDUCTOR	[M]
LB526	J0JBC0000014	CHIP INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB527	J0JBC0000014	CHIP INDUCTOR	[M]
LB528	J0JBC0000014	CHIP INDUCTOR	[M]
LB529	J0JBC0000014	CHIP INDUCTOR	[M]
LB530	J0JBC0000014	CHIP INDUCTOR	[M]
LB531	J0JBC0000014	CHIP INDUCTOR	[M]
LB532	J0JBC0000014	CHIP INDUCTOR	[M]
LB533	J0JBC0000014	CHIP INDUCTOR	[M]
LB601	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB602	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB603	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB604	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB605	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB606	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB607	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB608	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB609	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB610	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB611	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB612	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB613	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB614	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB615	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB616	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB617	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB618	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB619	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB721	J0JHC0000055	CHIP INDUCTOR	[M]
LB725	J0JBC0000014	CHIP INDUCTOR	[M]
LB726	J0JBC0000041	CHIP INDUCTOR	[M]
LB727	J0JBC0000041	CHIP INDUCTOR	[M]
LB1103	J0JGC0000050	EMI FILTER	[M]
LB1202	J0JGC0000050	EMI FILTER	[M]
LB1301	J0JGC0000050	EMI FILTER	[M]
LB1302	J0JGC0000050	EMI FILTER	[M]
LB1401	J0JGC0000050	EMI FILTER	[M]
LB1502	J0JGC0000050	EMI FILTER	[M]
LB1503	J0JGC0000050	EMI FILTER	[M]
LB1504	J0JGC0000050	EMI FILTER	[M]
LB1506	J0JGC0000050	EMI FILTER	[M]
LB1701	J0JGC0000050	EMI FILTER	[M]
LB1801	J0JGC0000050	EMI FILTER	[M]
LB1900	J0JBC0000014	CHIP INDUCTOR	[M]
LB1901	J0JBC0000014	CHIP INDUCTOR	[M]
LB1902	J0JBC0000014	CHIP INDUCTOR	[M]
LB1903	J0JBC0000014	CHIP INDUCTOR	[M]
LB1904	J0JBC0000014	CHIP INDUCTOR	[M]
LB1906	J0JBC0000014	CHIP INDUCTOR	[M]
LB1907	J0JBC0000014	CHIP INDUCTOR	[M]
LB1908	J0JBC0000014	CHIP INDUCTOR	[M]
LB1910	J0JBC0000014	CHIP INDUCTOR	[M]
LB1911	J0JGC0000050	EMI FILTER	[M]
LB1912	J0JGC0000050	EMI FILTER	[M]
LB1913	J0JGC0000050	EMI FILTER	[M]
LB1915	J0JBC0000014	CHIP INDUCTOR	[M]
LB1916	J0JBC0000014	CHIP INDUCTOR	[M]
LB1917	J0JBC0000014	CHIP INDUCTOR	[M]
LB1918	J0JBC0000014	CHIP INDUCTOR	[M]
LB1919	J0JGC0000050	EMI FILTER	[M]
LB1921	J0JBC0000014	CHIP INDUCTOR	[M]
LB1922	J0JBC0000014	CHIP INDUCTOR	[M]
LB1923	J0JCC0000103	FILTER	[M]
LB1924	J0JCC0000103	FILTER	[M]
LB2707	J0JKC0000002	CHIP INDUCTOR	[M]
LB3001	J0JJC0000003	FILTER	[M]
LB3002	J0JJC0000003	FILTER	[M]
LB3003	J0JJC0000003	FILTER	[M]
LB3004	J0JJC0000003	FILTER	[M]
LB3104	J0JCC0000103	FILTER	[M]
LB3105	J0JCC0000103	FILTER	[M]
LB3207	J0JCC0000119	CHIP INDUCTOR	[M]
LB3208	J0JCC0000119	CHIP INDUCTOR	[M]
LB3209	J0JCC0000119	CHIP INDUCTOR	[M]
LB3210	J0JCC0000119	CHIP INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB3211	J0JCC0000119	CHIP INDUCTOR	[M]
LB3901	J0JHC0000045	CHIP INDUCTOR	[M]
LB3902	J0JHC0000045	CHIP INDUCTOR	[M]
LB3903	J0JHC0000045	CHIP INDUCTOR	[M]
LB3904	J0JHC0000045	CHIP INDUCTOR	[M]
LB3905	J0JCC0000119	CHIP INDUCTOR	[M]
LB3906	J0JCC0000119	CHIP INDUCTOR	[M]
LB3907	J0JCC0000119	CHIP INDUCTOR	[M]
LB3908	J0JCC0000119	CHIP INDUCTOR	[M]
LB8001	J0JHC0000045	CHIP INDUCTOR	[M]
LB8011	J0JHC0000045	CHIP INDUCTOR	[M]
LB8257	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8258	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8259	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8260	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8301	J0JBC0000042	CHIP BEAD	[M]
LB8302	J0JBC0000042	CHIP BEAD	[M]
LB8303	J0JBC0000042	CHIP BEAD	[M]
LB8304	J0JBC0000042	CHIP BEAD	[M]
LB8305	J0JBC0000042	CHIP BEAD	[M]
LB8401	J0JBC0000042	CHIP BEAD	[M]
LB8421	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8422	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8423	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8424	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8425	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8426	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8427	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8428	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8429	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8431	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8491	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8530	J0JHC0000045	CHIP INDUCTOR	[M]
LB8531	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8551	J0JBC0000042	CHIP BEAD	[M]
LB8561	J0JBC0000042	CHIP BEAD	[M]
LB8571	J0JBC0000042	CHIP BEAD	[M]
LB8691	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8692	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8693	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8701	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
LB8702	J0JCC0000119	CHIP INDUCTOR	[M]
		TRANSFORMERS	
T701	ETS19AB221AG	TRANSFORMER	[M] ⚠
T721	ETS35BC2HGAD	TRANSFORMER	[M] ⚠
T722	G4D1A0000117	SWITCHING TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z701	ERZV10D471CS	ZENER	[M] ⚠
		FUSE HOLDERS	
ZA701	EYF52BCY	FUSE HOLDER	[M]
ZA702	EYF52BCY	FUSE HOLDER	[M]
		EARTH TERMINALS	
ZJ101	K9ZZ00001279	EARTH TERMINAL	[M]
ZJ102	K9ZZ00001279	EARTH TERMINAL	[M]
ZJ301	K9ZZ00001279	EARTH TERMINAL	[M]
ZJ702	K9ZZ00001279	EARTH TERMINAL	[M]
ZJ721	K9ZZ00001279	EARTH TERMINAL	[M]
ZJ722	K9ZZ00001279	EARTH TERMINAL	[M]
		VARIABLE RESISTORS	
VR800	EVEKF2F3024M	VR VOLUME JOG	[M]
VA1	EZJZ0V80008B	VARISTOR	[M]
VA2	EZJZ0V80008B	VARISTOR	[M]
VA3	EZJZ0V80008B	VARISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
VA3901	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3902	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3903	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3904	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3905	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3906	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3907	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3908	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3909	EZJZ0V80008B	VARISTOR	[M]
VA3910	EZJZ0V80008B	VARISTOR	[M]
VA3911	EZJZ0V80008B	VARISTOR	[M]
VA3912	EZJZ0V80008B	VARISTOR	[M]
VA3913	EZJZ0V80008B	VARISTOR	[M]
IR800	B3RAD0000051	REMOTE SENSOR	[M]
		RELAY	
RY701	K6B1AEA00015	POWER RELAY	[M] ⚠
		OSCILLATORS	
X1	H0A451500001	CRYSTAL OSCILLATOR	[M]
X300	H0J245500068	CRYSTAL OSCILLATOR	[M]
X301	H0J240500023	CRYSTAL OSCILLATOR	[M]
X501	H0J150500006	CRYSTAL OSCILLATOR	[M]
X503	H0A327200108	CRYSTAL RESONATOR	[M]
X1100	H0J250500049	CRYSTAL OSCILLATOR	[M]
X1200	H0J240500031	CRYSTAL OSCILLATOR	[M]
X1501	H0J166500008	CRYSTAL OSCILLATOR	[M]
X1800	H2D120500012	CRYSTAL OSCILLATOR	[M]
X1801	H0J169500030	CRYSTAL OSCILLATOR	[M]
X1900	H0J123500005	CRYSTAL OSCILLATOR	[M]
X1901	H0J150500006	CRYSTAL OSCILLATOR	[M]
X8621	H0J270500080	CRYSTAL OSCILLATOR	[M]
		DISPLAY TUBES	
FL3001	F1J1A1050021	CHIP FILTER	[M]
FL3002	F1J1A1050021	CHIP FILTER	[M]
FL3003	F1J1A1050021	CHIP FILTER	[M]
FL3291	F1J1E1040022	CHIP FILTER	[M]
FL8101	F1H0J1050018	INDUCTOR	[M]
FL8102	F1H0J1050018	INDUCTOR	[M]
FL8103	F1H0J1050018	INDUCTOR	[M]
FL8104	F1J1E1040022	INDUCTOR	[M]
FL8421	F1H0J1050018	INDUCTOR	[M]
FL59005	F1J1A1050021	CHIP FILTER	[M]
		FUSE	
F701	K5D402AQ0002	FUSE 4A	[M] ⚠
		FUSE PROTECTORS	
IP701	K5H302100004	FUSE PROTECTOR	[M] ⚠
IP702	K5H2022A0011	FUSE PROTECTOR	[M] ⚠
IP703	K5H302100004	FUSE PROTECTOR	[M] ⚠
IP722	K5H7512A0010	FUSE PROTECTOR	[M] ⚠
		JACKS	
JK1	K1FA104B0047	JACK XM CONNECTOR	[M]
JK101	K4AZ08B00003	JACK SPEAKER (FRONT/CENTER)	[M]
JK102	K4AZ02B00005	JACK SPEAKER (WOOFER)	[M]
JK501	K2HA208B0002	JACK COMBO	[M]
JK800	K2HC103A0031	JACK HEADPHONE	[M]
JK801	K2HC1YYA0005	JACK MUSIC PORT	[M]
JK2001	K2LC108B0083	LAN CONNECTOR	[M]
JK8001	B3RAB0000056	JACK OPTICAL IN (TV)	[M]
JK8002	B3ZAZ0000019	JACK OPTICAL OUT	[M]
P701	K2AB2B000007	JACK AC INLET	[M] ⚠

Ref. No.	Part No.	Part Name & Description	Remarks
P3901	K1FA119E0002	HDMI CONNECTOR	[M]
		WIRE	
J1	REX1269	2P WIRE (POWER-AC-INLET)	[M]
J3	REX1273	1P WIRE (REGULATOR-POWER)	[M]
		CABLE HOLDERS	
JW801	K1YZ05000005	5P CABLE HOLDER	[M]
JW802	K1YZ03000010	3P CABLE HOLDER	[M]
JW805	K1YZ04000002	4P CABLE HOLDER	[M]
P702	K1YZ04000002	4P CABLE HOLDER	[M]
P841	K1YZ05000005	5P CABLE HOLDER	[M]
P842	K1YZ03000010	3P CABLE HOLDER	[M]
		PACKING MATERIALS	
P1	RPG8201-1	PACKING CASE	[M]
P2	RPN1971-1	POLYFOAM	[M]
P3	RPFX0058-1J	MIRAMAT	[M]
		ACCESSORIES	
A1	EUR7662YZ0	REMOTE CONTROL	[M]
A1-1	UR76EC5903A	R/C BATTERY COVER	[M]
A2	K2CB2CB00018	AC CORD	[M] ⚠
A3	RQT9007-P	O/I BOOK (EN)	[M]
A4	K2KA2BA00001	VIDEO CABLE	[M]
A5	N1DAAAA00002	AM LOOP ANTENNA	[M]
A6	RSA0007-L	FM ANTENNA	[M]
A7	REE1402	SPEAKER CABLE (4M)	[M]
A8	REEX0720A	SPEAKER CORD (4M/WHITE)	[M]
A9	REEX0720B	SPEAKER CORD (4M/RED)	[M]
A10	RFE0205	IPOD DOCK	[M]
		RESISTORS	
R1	ERJ3GEYJ104V	100K 1/16W	[M]
R1	ERJ3GEYJ473V	47K 1/16W	[M]
R2	ERJ3GEYJ104V	100K 1/16W	[M]
R2	ERJ3GEYJ472V	4.7K 1/16W	[M]
R3	ERJ3GEYJ101V	100 1/16W	[M]
R3	ERJ3GEYJ104V	100K 1/16W	[M]
R4	ERJ3GEYJ101V	100 1/16W	[M]
R4	ERJ3GEYJ104V	100K 1/16W	[M]
R5	ERJ3GEYJ332V	3.3K 1/16W	[M]
R6	ERJ3GEYJ332V	3.3K 1/16W	[M]
R6	ERJ3GEYJ472V	4.7K 1/16W	[M]
R7	ERJ3GEYJ102V	1K 1/16W	[M]
R7	ERJ3GEYJ391V	390 1/16W	[M]
R8	ERJ3GEYJ102V	1K 1/16W	[M]
R8	ERJ3GEYJ103V	10K 1/16W	[M]
R9	ERJ3GEYJ101V	100 1/16W	[M]
R10	ERJ3GEYJ101V	100 1/16W	[M]
R11	ERJ3GEYJ102V	1K 1/16W	[M]
R12	ERJ3GEYJ101V	100 1/16W	[M]
R12	ERJ3GEYJ102V	1K 1/16W	[M]
R13	ERJ3GEY0R00V	0 1/16W	[M]
R13	ERJ3GEYJ472V	4.7K 1/16W	[M]
R14	ERJ3GEY0R00V	0 1/16W	[M]
R14	ERJ3GEYJ472V	4.7K 1/16W	[M]
R15	ERJ3GEYJ470V	47 1/16W	[M]
R15	ERJ3GEYJ472V	4.7K 1/16W	[M]
R16	ERJ3GEYJ470V	47 1/16W	[M]
R16	ERJ3GEYJ472V	4.7K 1/16W	[M]
R17	ERJ3GEYJ470V	47 1/16W	[M]
R17	ERJ3GEYJ472V	4.7K 1/16W	[M]
R18	ERJ3GEYJ472V	4.7K 1/16W	[M]
R19	ERJ3GEYJ470V	47 1/16W	[M]
R19	ERJ3GEYJ473V	47K 1/16W	[M]
R20	ERJ3GEYJ470V	47 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R20	ERJ3GEYJ473V	47K 1/16W	[M]
R21	ERJ3GEYJ470V	47 1/16W	[M]
R21	ERJ3GEYJ473V	47K 1/16W	[M]
R22	ERJ3GEYJ470V	47 1/16W	[M]
R22	ERJ3GEYJ473V	47K 1/16W	[M]
R23	ERJ3GEYJ104V	100K 1/16W	[M]
R23	ERJ3GEYJ473V	47K 1/16W	[M]
R24	ERJ3GEYJ104V	100K 1/16W	[M]
R24	ERJ3GEYJ473V	47K 1/16W	[M]
R25	ERJ3GEYJ470V	47 1/16W	[M]
R25	ERJ3GEYJ823V	82K 1/16W	[M]
R26	ERJ3GEYJ333V	33K 1/16W	[M]
R26	ERJ3GEYJ470V	47 1/16W	[M]
R27	ERJ3GEYJ153V	15K 1/16W	[M]
R28	ERJ3GEYJ103V	10K 1/16W	[M]
R29	ERJ3GEYJ682V	6.8K 1/16W	[M]
R30	ERJ3GEYJ562V	5.6K 1/16W	[M]
R31	ERJ3GEYJ474V	470K 1/16W	[M]
R31	ERJ6GEYJ102V	1K 1/10W	[M]
R32	ERJ3GEYJ103V	10K 1/16W	[M]
R32	ERJ6GEYJ102V	1K 1/10W	[M]
R33	ERJ3GEYJ471V	470 1/16W	[M]
R33	ERJ6GEYJ104V	100K 1/10W	[M]
R34	ERJ3GEYJ824V	820K 1/16W	[M]
R34	ERJ6GEYJ104V	100K 1/10W	[M]
R35	ERJ3GEYJ682V	6.8K 1/16W	[M]
R36	ERJ3GEYJ472V	4.7K 1/16W	[M]
R37	ERJ3GEYJ101V	100 1/16W	[M]
R38	ERJ3GEYJ472V	4.7K 1/16W	[M]
R39	ERJ3GEYJ102V	1K 1/16W	[M]
R39	ERJ6GEYJ104V	100K 1/10W	[M]
R40	ERJ3GEYJ223V	22K 1/16W	[M]
R40	ERJ6GEYJ104V	100K 1/10W	[M]
R41	ERJ3GEYJ473V	47K 1/16W	[M]
R42	ERJ3GEYJ104V	100K 1/16W	[M]
R43	ERJ3GEY0R00V	0 1/16W	[M]
R43	ERJ3GEYJ104V	100K 1/16W	[M]
R44	ERJ3GEY0R00V	0 1/16W	[M]
R44	ERJ3GEYJ104V	100K 1/16W	[M]
R45	ERJ3GEY0R00V	0 1/16W	[M]
R45	ERJ3GEYJ104V	100K 1/16W	[M]
R46	ERJ3GEY0R00V	0 1/16W	[M]
R46	ERJ3GEYJ104V	100K 1/16W	[M]
R47	ERJ3GEYJ104V	100K 1/16W	[M]
R48	ERJ3GEYJ821V	820 1/16W	[M]
R49	ERJ3GEYJ182V	1.8K 1/16W	[M]
R50	ERJ3GEYJ821V	820 1/16W	[M]
R51	ERJ3GEYJ182V	1.8K 1/16W	[M]
R52	ERJ3GEYJ471V	470 1/16W	[M]
R53	ERJ3GEY0R00V	0 1/16W	[M]
R53	ERJ3GEYJ183V	18K 1/16W	[M]
R54	ERJ3GEY0R00V	0 1/16W	[M]
R54	ERJ3GEYJ103V	10K 1/16W	[M]
R55	ERJ3GEYJ104V	100K 1/16W	[M]
R55	ERJ3GEYJ223V	22K 1/16W	[M]
R56	ERJ3GEYJ223V	22K 1/16W	[M]
R57	ERJ3GEYJ101V	100 1/16W	[M]
R57	ERJ3GEYJ470V	47 1/16W	[M]
R58	ERJ3GEYJ101V	100 1/16W	[M]
R58	ERJ3GEYJ470V	47 1/16W	[M]
R59	ERJ3GEYJ104V	100K 1/16W	[M]
R61	ERJ3GEYJ103V	10K 1/16W	[M]
R62	ERJ3GEYJ104V	100K 1/16W	[M]
R62	ERJ3GEYJ471V	470 1/16W	[M]
R63	ERJ3GEYJ183V	18K 1/16W	[M]
R64	ERJ3GEYJ103V	10K 1/16W	[M]
R64	ERJ3GEYJ470V	47 1/16W	[M]
R65	ERJ3GEYJ104V	100K 1/16W	[M]
R65	ERJ3GEYJ223V	22K 1/16W	[M]
R66	ERJ3GEY0R00V	0 1/16W	[M]
R66	ERJ3GEYJ223V	22K 1/16W	[M]
R67	ERJ3GEYJ330V	33 1/16W	[M]
R68	ERJ3GEYJ332V	3.3K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R69	ERJ3GEYJ101V	100 1/16W	[M]
R70	ERJ3GEYJ103V	10K 1/16W	[M]
R72	ERJ3GEYJ103V	10K 1/16W	[M]
R74	ERJ3GEYJ330V	33 1/16W	[M]
R75	ERJ3GEYJ101V	100 1/16W	[M]
R76	ERJ3GEYJ332V	3.3K 1/16W	[M]
R77	ERJ3GEYJ332V	3.3K 1/16W	[M]
R78	ERJ3GEYJ103V	10K 1/16W	[M]
R79	ERJ3GEYJ103V	10K 1/16W	[M]
R80	ERJ3GEYJ101V	100 1/16W	[M]
R94	ERJ3GEYJ473V	47K 1/16W	[M]
R95	ERJ3GEYJ472V	4.7K 1/16W	[M]
R96	ERJ3GEYJ473V	47K 1/16W	[M]
R97	ERJ3GEYJ472V	4.7K 1/16W	[M]
R98	ERJ3GEYJ472V	4.7K 1/16W	[M]
R99	ERJ3GEYJ473V	47K 1/16W	[M]
R101	ERJ3GEYJ201V	200 1/16W	[M]
R102	ERJ3GEYJ201V	200 1/16W	[M]
R103	ERJ3GEYJ470V	47 1/16W	[M]
R104	ERJ3GEYJ331V	330 1/16W	[M]
R105	ERJ3GEYJ331V	330 1/16W	[M]
R106	ERJ3EKF1822V	1.8K 1/16W	[M]
R107	ERJ3GEYJ331V	330 1/16W	[M]
R108	ERJ3GEYJ331V	330 1/16W	[M]
R109	ERJ3GEY0R00V	0 1/16W	[M]
R110	ERJ3GEYJ470V	47 1/16W	[M]
R111	ERJ3GEYJ470V	47 1/16W	[M]
R112	ERJ3GEYJ470V	47 1/16W	[M]
R113	ERJ3GEYJ470V	47 1/16W	[M]
R114	ERJ3GEYJ470V	47 1/16W	[M]
R115	ERJ3GEYJ104V	100K 1/16W	[M]
R116	ERJ3GEYJ224V	220K 1/16W	[M]
R117	ERJ3GEYJ104V	100K 1/16W	[M]
R118	ERJ3GEYJ224V	220K 1/16W	[M]
R119	ERJ3GEYJ470V	47 1/16W	[M]
R120	ERJ3GEYJ470V	47 1/16W	[M]
R121	ERJ3GEYJ470V	47 1/16W	[M]
R122	ERJ3GEYJ470V	47 1/16W	[M]
R123	ERJ3GEYJ103V	10K 1/16W	[M]
R124	ERJ3GEY0R00V	0 1/16W	[M]
R125	ERJ3GEYJ331V	330 1/16W	[M]
R126	ERJ6GEYJ562V	5.6K 1/10W	[M]
R127	ERJ6GEYJ562V	5.6K 1/10W	[M]
R128	ERJ6GEYJ103V	10K 1/10W	[M]
R129	ERJ6GEYJ103V	10K 1/10W	[M]
R130	ERJ6GEYJ103V	10K 1/10W	[M]
R131	ERJ6GEYJ682V	6.8K 1/10W	[M]
R132	ERJ3GEYF822V	8.2K 1/16W	[M]
R133	ERJ3GEYJ222V	2.2K 1/16W	[M]
R134	ERJ3GEYJ470V	47 1/16W	[M]
R135	ERJ3GEYJ103V	10K 1/16W	[M]
R136	ERJ3GEYJ470V	47 1/16W	[M]
R137	ERJ3GEYJ470V	47 1/16W	[M]
R138	ERJ3GEYF222V	2.2K 1/16W	[M]
R139	ERJ3GEYJ151V	150 1/16W	[M]
R152	ERJ3GEYJ333V	33K 1/16W	[M]
R167	ERJ3GEYJ224V	220K 1/16W	[M]
R168	ERJ3GEYJ224V	220K 1/16W	[M]
R169	ERJ3GEYJ473V	47K 1/16W	[M]
R170	ERJ3GEYJ104V	100K 1/16W	[M]
R171	ERJ3GEYJ103V	10K 1/16W	[M]
R172	ERJ3GEYJ103V	10K 1/16W	[M]
R173	ERJ3GEYJ103V	10K 1/16W	[M]
R174	ERJ3GEYJ103V	10K 1/16W	[M]
R175	ERJ3GEYJ104V	100K 1/16W	[M]
R176	ERJ3GEYJ102V	1K 1/16W	[M]
R177	ERDS1FVJ472T	4.7K 1/2W	[M]
R178	ERJ3GEYJ185V	1.8M 1/16W	[M]
R179	ERJ3GEYJ473V	47K 1/16W	[M]
R181	ERJ3GEYJ104V	100K 1/16W	[M]
R182	ERJ3GEYJ223V	22K 1/16W	[M]
R201	ERJ3GEYJ100V	10 1/16W	[M]
R202	ERJ3GEYJ100V	10 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R203	ERJ3GEYJ102V	1K 1/16W	[M]
R204	ERJ3GEYJ101V	100 1/16W	[M]
R205	ERJ3GEYJ101V	100 1/16W	[M]
R206	ERJ3GEYJ100V	10 1/16W	[M]
R207	ERJ3GEYJ100V	10 1/16W	[M]
R208	ERJ3GEYJ100V	10 1/16W	[M]
R209	ERJ3GEYJ683V	68K 1/16W	[M]
R210	ERJ6GEYJ180V	18 1/10W	[M]
R211	ERJ6GEYJ180V	18 1/10W	[M]
R212	ERJ6GEYJ180V	18 1/10W	[M]
R213	ERJ6GEYJ180V	18 1/10W	[M]
R214	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R215	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R216	ERJ3GEYJ3R3V	3.3 1/16W	[M]
R217	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R218	ERJ6GEYJ103V	10K 1/10W	[M]
R219	ERJ6GEYJ103V	10K 1/10W	[M]
R231	ERJ3GEYJ100V	10 1/16W	[M]
R232	ERJ3GEYJ100V	10 1/16W	[M]
R233	ERJ3GEYJ102V	1K 1/16W	[M]
R234	ERJ3GEYJ101V	100 1/16W	[M]
R235	ERJ3GEYJ101V	100 1/16W	[M]
R236	ERJ3GEYJ100V	10 1/16W	[M]
R237	ERJ3GEYJ100V	10 1/16W	[M]
R238	ERJ3GEYJ100V	10 1/16W	[M]
R239	ERJ3GEYJ683V	68K 1/16W	[M]
R240	ERJ6GEYJ180V	18 1/10W	[M]
R241	ERJ6GEYJ180V	18 1/10W	[M]
R242	ERJ6GEYJ180V	18 1/10W	[M]
R243	ERJ6GEYJ180V	18 1/10W	[M]
R244	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R245	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R246	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R247	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R248	ERJ6GEYJ103V	10K 1/10W	[M]
R249	ERJ6GEYJ103V	10K 1/10W	[M]
R261	ERJ3GEYJ100V	10 1/16W	[M]
R262	ERJ3GEYJ100V	10 1/16W	[M]
R263	ERJ3GEYJ101V	100 1/16W	[M]
R264	ERJ3GEYJ101V	100 1/16W	[M]
R265	ERJ3GEYJ101V	100 1/16W	[M]
R266	ERJ3GEYJ100V	10 1/16W	[M]
R267	ERJ3GEYJ100V	10 1/16W	[M]
R268	ERJ3GEYJ100V	10 1/16W	[M]
R269	ERJ3GEYJ683V	68K 1/16W	[M]
R270	ERJ6GEYJ180V	18 1/10W	[M]
R271	ERJ6GEYJ180V	18 1/10W	[M]
R272	ERJ6GEYJ180V	18 1/10W	[M]
R273	ERJ6GEYJ180V	18 1/10W	[M]
R276	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R277	ERJ6GEYJ3R3V	3.3 1/10W	[M]
R279	ERJ6GEYJ103V	10K 1/10W	[M]
R280	ERJ3GEYJ104V	100K 1/16W	[M]
R281	ERJ3GEYJ224V	220K 1/16W	[M]
R282	ERJ3GEYJ104V	100K 1/16W	[M]
R283	ERJ3GEYJ224V	220K 1/16W	[M]
R284	ERJ3GEYJ333V	33K 1/16W	[M]
R285	ERJ3GEYJ104V	100K 1/16W	[M]
R286	ERJ3GEYJ104V	100K 1/16W	[M]
R287	ERJ3GEYJ333V	33K 1/16W	[M]
R288	ERJ3GEYJ103V	10K 1/16W	[M]
R289	ERJ3GEYJ472V	4.7K 1/16W	[M]
R290	ERJ3GEYJ473V	47K 1/16W	[M]
R300	ERJ3GEYJ102V	1K 1/16W	[M]
R301	ERJ3GEYJ102V	1K 1/16W	[M]
R302	ERJ3GEYJ102V	1K 1/16W	[M]
R303	ERJ3GEYJ102V	1K 1/16W	[M]
R304	ERJ3GEYJ102V	1K 1/16W	[M]
R305	ERJ3GEYJ102V	1K 1/16W	[M]
R306	ERJ3GEYJ102V	1K 1/16W	[M]
R307	ERJ3GEYJ102V	1K 1/16W	[M]
R310	ERJ3GEY0R00V	0 1/16W	[M]
R311	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R312	ERJ3GEY0R00V	0 1/16W	[M]
R313	ERJ3GEY0R00V	0 1/16W	[M]
R336	ERJ3GEYJ103V	10K 1/16W	[M]
R337	ERJ3GEYJ102V	1K 1/16W	[M]
R338	ERJ3GEYJ102V	1K 1/16W	[M]
R339	ERJ3GEYJ221V	220 1/16W	[M]
R340	ERJ3GEYJ102V	1K 1/16W	[M]
R341	ERJ3GEY0R00V	0 1/16W	[M]
R342	ERJ3GEYJ102V	1K 1/16W	[M]
R344	ERJ3GEYJ102V	1K 1/16W	[M]
R346	ERJ3GEYJ330V	33 1/16W	[M]
R347	ERJ3GEYJ330V	33 1/16W	[M]
R348	ERJ3GEYJ330V	33 1/16W	[M]
R349	ERJ3GEYJ330V	33 1/16W	[M]
R350	ERJ3GEYJ330V	33 1/16W	[M]
R351	ERJ3GEYJ330V	33 1/16W	[M]
R353	ERJ3GEY0R00V	0 1/16W	[M]
R354	ERJ3GEYJ330V	33 1/16W	[M]
R355	ERJ3GEYJ330V	33 1/16W	[M]
R356	ERJ3GEYJ330V	33 1/16W	[M]
R357	ERJ3GEYJ330V	33 1/16W	[M]
R358	ERJ3GEYJ330V	33 1/16W	[M]
R359	ERJ3GEYJ330V	33 1/16W	[M]
R360	ERJ3GEYJ330V	33 1/16W	[M]
R361	ERJ3GEYJ330V	33 1/16W	[M]
R362	ERJ3GEYJ330V	33 1/16W	[M]
R363	ERJ3GEYJ105V	1M 1/16W	[M]
R364	ERJ3GEYJ102V	1K 1/16W	[M]
R365	ERJ3GEYJ102V	1K 1/16W	[M]
R366	ERJ3GEY0R00V	0 1/16W	[M]
R367	ERJ3GEY0R00V	0 1/16W	[M]
R368	ERJ3GEY0R00V	0 1/16W	[M]
R369	ERJ3GEY0R00V	0 1/16W	[M]
R370	ERJ3GEYJ473V	47K 1/16W	[M]
R371	ERJ3GEYJ473V	47K 1/16W	[M]
R372	ERJ3GEYJ330V	33 1/16W	[M]
R373	ERJ3GEYJ473V	47K 1/16W	[M]
R374	ERJ3GEYJ102V	1K 1/16W	[M]
R375	ERJ3GEYJ473V	47K 1/16W	[M]
R376	ERJ3GEYJ102V	1K 1/16W	[M]
R377	ERJ3GEYJ102V	1K 1/16W	[M]
R378	ERJ3GEYJ102V	1K 1/16W	[M]
R379	ERJ3GEYJ102V	1K 1/16W	[M]
R380	ERJ3GEYJ473V	47K 1/16W	[M]
R382	ERJ3GEYJ330V	33 1/16W	[M]
R387	ERJ3GEYJ473V	47K 1/16W	[M]
R388	ERJ3GEYJ330V	33 1/16W	[M]
R389	ERJ3GEYJ473V	47K 1/16W	[M]
R390	ERJ3GEYJ473V	47K 1/16W	[M]
R391	ERJ3GEYJ330V	33 1/16W	[M]
R392	ERJ3GEYJ330V	33 1/16W	[M]
R393	ERJ3GEYJ331V	330 1/16W	[M]
R394	ERJ3GEYJ331V	330 1/16W	[M]
R399	ERJ3GEYJ103V	10K 1/16W	[M]
R401	ERJ6GEYJ2R2V	2.2 1/10W	[M]
R405	ERJ3GEYJ223V	22K 1/16W	[M]
R406	ERJ3RBD471V	470 3W	[M]
R407	ERJ3RBD272V	2.7K 3W	[M]
R408	ERJ3RBD562V	5.6K 3W	[M]
R409	ERJ3GEYJ561V	560 1/16W	[M]
R410	D1BFR047A010	0.47 1/16W	[M]
R411	ERJ3GEYJ102V	1K 1/16W	[M]
R429	ERJ3GEY0R00V	0 1/16W	[M]
R432	ERJ3GEY0R00V	0 1/16W	[M]
R434	ERJ3GEY0R00V	0 1/16W	[M]
R436	ERJ3GEY0R00V	0 1/16W	[M]
R438	ERJ6GEYJ100V	10 1/10W	[M]
R440	ERJ3GEYJ103V	10K 1/16W	[M]
R443	ERJ3GEYJ105V	1M 1/16W	[M]
R444	ERJ3GEY0R00V	0 1/16W	[M]
R445	ERJ3GEYJ103V	10K 1/16W	[M]
R451	ERJ3GEY0R00V	0 1/16W	[M]
R452	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R453	ERJ3GEY0R00V	0 1/16W	[M]
R454	ERJ3GEY0R00V	0 1/16W	[M]
R455	ERJ6GEYJ100V	10 1/10W	[M]
R456	ERJ6GEYJ100V	10 1/10W	[M]
R457	ERJ3GEY0R00V	0 1/16W	[M]
R458	ERJ3GEY0R00V	0 1/16W	[M]
R459	ERJ3GEY0R00V	0 1/16W	[M]
R460	ERJ3GEY0R00V	0 1/16W	[M]
R461	ERJ6GEYJ100V	10 1/10W	[M]
R462	ERJ6GEYJ100V	10 1/10W	[M]
R463	ERJ3GEY0R00V	0 1/16W	[M]
R464	ERJ3GEY0R00V	0 1/16W	[M]
R465	ERJ3GEY0R00V	0 1/16W	[M]
R466	ERJ3GEY0R00V	0 1/16W	[M]
R467	ERJ6GEYJ100V	10 1/10W	[M]
R468	ERJ6GEYJ100V	10 1/10W	[M]
R469	ERJ3GEY0R00V	0 1/16W	[M]
R470	ERJ3GEY0R00V	0 1/16W	[M]
R471	ERJ3GEY0R00V	0 1/16W	[M]
R472	ERJ3GEY0R00V	0 1/16W	[M]
R473	ERJ6GEYJ100V	10 1/10W	[M]
R474	ERJ6GEYJ100V	10 1/10W	[M]
R481	ERJ3GEY0R00V	0 1/16W	[M]
R482	ERJ3GEY0R00V	0 1/16W	[M]
R483	ERJ3GEY0R00V	0 1/16W	[M]
R484	ERJ3GEY0R00V	0 1/16W	[M]
R485	ERJ3GEY0R00V	0 1/16W	[M]
R500	ERJ3GEYJ102V	1K 1/16W	[M]
R503	ERJ3GEYJ223V	22K 1/16W	[M]
R504	ERJ3GEYJ225V	2.2M 1/16W	[M]
R505	ERJ3GEYJ473V	47K 1/16W	[M]
R506	ERJ3GEYJ472V	4.7K 1/16W	[M]
R507	ERJ3GEYJ104V	100K 1/16W	[M]
R508	ERJ3GEYJ222V	2.2K 1/16W	[M]
R509	ERJ3GEYJ272V	2.7K 1/16W	[M]
R510	ERJ3GEYJ103V	10K 1/16W	[M]
R511	ERJ3GEYJ103V	10K 1/16W	[M]
R512	ERJ3GEYJ103V	10K 1/16W	[M]
R513	ERJ3GEYJ103V	10K 1/16W	[M]
R514	ERJ3GEYJ103V	10K 1/16W	[M]
R515	ERJ3GEYJ333V	33K 1/16W	[M]
R517	ERJ3GEYJ102V	1K 1/16W	[M]
R518	ERJ3GEYJ102V	1K 1/16W	[M]
R519	ERJ3GEYJ333V	33K 1/16W	[M]
R520	ERJ3GEYJ333V	33K 1/16W	[M]
R521	ERJ3GEYJ473V	47K 1/16W	[M]
R522	ERJ3GEYJ473V	47K 1/16W	[M]
R523	ERJ3GEYJ103V	10K 1/16W	[M]
R525	ERJ3GEYJ103V	10K 1/16W	[M]
R526	ERJ3GEYJ103V	10K 1/16W	[M]
R527	ERJ3GEYJ101V	100 1/16W	[M]
R528	ERJ3GEYJ102V	1K 1/16W	[M]
R529	ERJ3GEYJ102V	1K 1/16W	[M]
R530	ERJ3GEYJ101V	100 1/16W	[M]
R531	ERJ3GEYJ101V	100 1/16W	[M]
R532	ERJ3GEYJ101V	100 1/16W	[M]
R533	ERJ3GEYJ101V	100 1/16W	[M]
R534	ERJ3GEYJ101V	100 1/16W	[M]
R535	ERJ3GEYJ101V	100 1/16W	[M]
R536	ERJ3GEYJ101V	100 1/16W	[M]
R537	ERJ3GEYJ101V	100 1/16W	[M]
R540	ERJ3GEYJ101V	100 1/16W	[M]
R541	ERJ3GEYJ101V	100 1/16W	[M]
R542	ERJ3GEYJ101V	100 1/16W	[M]
R543	ERJ3GEYJ101V	100 1/16W	[M]
R544	ERJ3GEYJ101V	100 1/16W	[M]
R545	ERJ3GEYJ101V	100 1/16W	[M]
R546	ERJ3GEYJ101V	100 1/16W	[M]
R547	ERJ3GEYJ102V	1K 1/16W	[M]
R548	ERJ3GEYJ101V	100 1/16W	[M]
R549	ERJ3GEYJ101V	100 1/16W	[M]
R550	ERJ3GEYJ102V	1K 1/16W	[M]
R551	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R552	ERJ3GEYJ103V	10K 1/16W	[M]
R555	ERJ3GEYJ473V	47K 1/16W	[M]
R556	ERJ3GEYJ101V	100 1/16W	[M]
R557	ERJ3GEYJ101V	100 1/16W	[M]
R558	ERJ3GEYJ101V	100 1/16W	[M]
R559	ERJ3GEYJ101V	100 1/16W	[M]
R560	ERJ3GEYJ101V	100 1/16W	[M]
R561	ERJ3GEYJ101V	100 1/16W	[M]
R562	ERJ3GEYJ101V	100 1/16W	[M]
R563	ERJ3GEYJ101V	100 1/16W	[M]
R564	ERJ3GEYJ473V	47K 1/16W	[M]
R565	ERJ3GEYJ101V	100 1/16W	[M]
R566	ERJ3GEYJ101V	100 1/16W	[M]
R567	ERJ3GEYJ103V	10K 1/16W	[M]
R568	ERJ3GEYJ101V	100 1/16W	[M]
R569	ERJ3GEYJ101V	100 1/16W	[M]
R570	ERJ3GEYJ101V	100 1/16W	[M]
R571	ERJ3GEYJ101V	100 1/16W	[M]
R572	ERJ3GEYJ330V	33 1/16W	[M]
R573	ERJ3GEYJ330V	33 1/16W	[M]
R574	ERJ3GEYJ330V	33 1/16W	[M]
R575	ERJ3GEYJ101V	100 1/16W	[M]
R576	ERJ3GEYJ101V	100 1/16W	[M]
R577	ERJ3GEYJ101V	100 1/16W	[M]
R578	ERJ3GEYJ103V	10K 1/16W	[M]
R579	ERJ3GEYJ101V	100 1/16W	[M]
R581	ERJ3GEYJ334V	330K 1/16W	[M]
R582	ERJ3GEYJ472V	4.7K 1/16W	[M]
R583	ERJ3GEY0R00V	0 1/16W	[M]
R586	ERJ3GEYJ101V	100 1/16W	[M]
R587	ERJ3GEYJ101V	100 1/16W	[M]
R588	ERJ3GEYJ101V	100 1/16W	[M]
R589	ERJ3GEYJ101V	100 1/16W	[M]
R590	ERJ3GEYJ101V	100 1/16W	[M]
R591	ERJ3GEYJ101V	100 1/16W	[M]
R592	ERJ3GEYJ101V	100 1/16W	[M]
R593	ERJ3GEYJ101V	100 1/16W	[M]
R594	ERJ3GEYJ101V	100 1/16W	[M]
R595	ERJ3GEYJ101V	100 1/16W	[M]
R596	ERJ3GEYJ101V	100 1/16W	[M]
R597	ERJ3GEYJ101V	100 1/16W	[M]
R598	ERJ3GEYJ102V	1K 1/16W	[M]
R599	ERJ3GEYJ102V	1K 1/16W	[M]
R600	ERJ3GEYJ101V	100 1/16W	[M]
R601	ERJ3GEYJ101V	100 1/16W	[M]
R602	ERJ3GEYJ101V	100 1/16W	[M]
R603	ERJ3GEYJ472V	4.7K 1/16W	[M]
R604	ERJ3GEYJ104V	100K 1/16W	[M]
R605	ERJ3GEYJ101V	100 1/16W	[M]
R606	ERJ3GEYJ102V	1K 1/16W	[M]
R607	ERJ3GEYJ102V	1K 1/16W	[M]
R608	ERJ3GEYJ101V	100 1/16W	[M]
R609	ERJ3GEYJ330V	33 1/16W	[M]
R610	ERJ3GEYJ330V	33 1/16W	[M]
R611	ERJ3GEYJ101V	100 1/16W	[M]
R612	ERJ3GEYJ101V	100 1/16W	[M]
R613	ERJ3GEYJ101V	100 1/16W	[M]
R614	ERJ3GEYJ102V	1K 1/16W	[M]
R615	ERJ3GEYJ101V	100 1/16W	[M]
R616	ERJ3GEYJ330V	33 1/16W	[M]
R617	ERJ3GEYJ101V	100 1/16W	[M]
R618	ERJ3GEYJ101V	100 1/16W	[M]
R619	ERJ3GEYJ101V	100 1/16W	[M]
R620	ERJ3GEYJ101V	100 1/16W	[M]
R621	ERJ3GEYJ101V	100 1/16W	[M]
R622	ERJ3GEYJ101V	100 1/16W	[M]
R623	ERJ3GEYJ330V	33 1/16W	[M]
R624	ERJ3GEYJ330V	33 1/16W	[M]
R625	ERJ3GEYJ101V	100 1/16W	[M]
R626	ERJ3GEYJ473V	47K 1/16W	[M]
R627	ERJ3GEYJ332V	3.3K 1/16W	[M]
R628	ERJ3GEYJ103V	10K 1/16W	[M]
R629	ERJ3GEYJ332V	3.3K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R630	ERJ3GEYJ153V	15K 1/16W	[M]
R632	ERJ3GEYJ333V	33K 1/16W	[M]
R633	ERJ3GEYJ223V	22K 1/16W	[M]
R634	ERJ3GEYJ153V	15K 1/16W	[M]
R635	ERJ3GEYJ333V	33K 1/16W	[M]
R636	ERJ3GEYJ333V	33K 1/16W	[M]
R637	ERJ3GEYJ103V	10K 1/16W	[M]
R638	ERJ3GEYJ103V	10K 1/16W	[M]
R639	ERJ3GEYJ332V	3.3K 1/16W	[M]
R640	ERJ3GEYJ332V	3.3K 1/16W	[M]
R641	ERJ3GEYJ101V	100 1/16W	[M]
R642	ERJ3RBD103V	10K 3W	[M]
R643	ERJ3RBD103V	10K 3W	[M]
R646	ERJ3GEYJ102V	1K 1/16W	[M]
R647	ERJ3GEYJ102V	1K 1/16W	[M]
R648	ERJ3RBD103V	10K 3W	[M]
R649	ERJ3RBD103V	10K 3W	[M]
R650	ERJ3RBD333V	33K 3W	[M]
R651	ERJ3RBD333V	33K 3W	[M]
R652	ERJ3GEYJ332V	3.3K 1/16W	[M]
R653	ERJ3GEYJ332V	3.3K 1/16W	[M]
R654	ERJ3GEYJ473V	47K 1/16W	[M]
R655	ERJ3GEYJ473V	47K 1/16W	[M]
R656	ERJ3GEYJ152V	1.5K 1/16W	[M]
R657	ERJ3GEYJ152V	1.5K 1/16W	[M]
R658	ERJ3GEYJ472V	4.7K 1/16W	[M]
R659	ERJ3GEYJ472V	4.7K 1/16W	[M]
R660	ERJ3GEYJ103V	10K 1/16W	[M]
R661	ERJ3GEYJ103V	10K 1/16W	[M]
R662	ERJ3GEYJ333V	33K 1/16W	[M]
R663	ERJ3GEYJ333V	33K 1/16W	[M]
R664	ERJ3GEYJ102V	1K 1/16W	[M]
R665	ERJ3GEYJ102V	1K 1/16W	[M]
R666	ERJ3GEYJ103V	10K 1/16W	[M]
R667	ERJ3GEYJ103V	10K 1/16W	[M]
R668	ERJ3GEYJ473V	47K 1/16W	[M]
R669	ERJ3GEYJ221V	220 1/16W	[M]
R670	ERJ3GEYJ103V	10K 1/16W	[M]
R671	ERJ3GEYJ103V	10K 1/16W	[M]
R672	ERJ3GEYJ473V	47K 1/16W	[M]
R673	ERJ3GEYJ473V	47K 1/16W	[M]
R674	ERJ3GEY0R00V	0 1/16W	[M]
R675	ERJ3GEY0R00V	0 1/16W	[M]
R676	ERJ3GEY0R00V	0 1/16W	[M]
R677	ERJ3GEY0R00V	0 1/16W	[M]
R678	ERJ6GEYJ680V	68 1/10W	[M]
R679	ERJ6GEYJ680V	68 1/10W	[M]
R680	ERJ3GEYJ102V	1K 1/16W	[M]
R681	ERJ3GEYJ102V	1K 1/16W	[M]
R682	ERJ3GEYJ682V	6.8K 1/16W	[M]
R683	ERJ3GEYJ682V	6.8K 1/16W	[M]
R686	ERJ3GEYJ103V	10K 1/16W	[M]
R687	ERJ3GEYJ103V	10K 1/16W	[M]
R688	ERJ3GEYJ682V	6.8K 1/16W	[M]
R689	ERJ3GEYJ682V	6.8K 1/16W	[M]
R690	ERJ3GEYJ103V	10K 1/16W	[M]
R691	ERJ3GEYJ103V	10K 1/16W	[M]
R692	ERJ3GEYJ102V	1K 1/16W	[M]
R693	ERJ3GEYJ102V	1K 1/16W	[M]
R696	ERJ3GEYJ473V	47K 1/16W	[M]
R697	ERJ3GEYJ473V	47K 1/16W	[M]
R698	ERJ3GEYJ473V	47K 1/16W	[M]
R699	ERJ3GEYJ103V	10K 1/16W	[M]
R701	ERDS1TJ474B	470K 1/2W	[M]
R702	ERJ6GEYJ153V	15K 1/10W	[M]
R703	ERJ6GEYJ334V	330K 1/10W	[M]
R704	ERDS1FVJ104T	100K 1/2W	[M]
R705	ERJ6GEYJ473V	47K 1/10W	[M]
R706	ERJ6GEYJ472V	4.7K 1/10W	[M]
R707	ERJ6GEYJ220V	22 1/10W	[M]
R708	ERJ6GEYJ102V	1K 1/10W	[M]
R709	ERJ6GEYJ222V	2.2K 1/10W	[M]
R710	ERJ3GEYF182V	1.8K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R711	ERJ3GEYF822V	8.2K 1/16W	[M]
R712	ERJ6GEYJ153V	15K 1/10W	[M]
R713	ERJ3GEYF822V	8.2K 1/16W	[M]
R714	ERJ3GEYJ223V	22K 1/16W	[M]
R715	ERJ3GEYF223V	22K 1/16W	[M]
R716	ERJ3GEYJ334V	330K 1/16W	[M]
R717	ERJ3GEYF223V	22K 1/16W	[M]
R718	ERJ3GEYJ223V	22K 1/16W	[M]
R719	ERJ3GEYF223V	22K 1/16W	[M]
R720	ERJ3GEYJ223V	22K 1/16W	[M]
R721	ERDS1FVJ2R2T	2.2 1/2W	[M]
R722	ERJ6GEYJ392V	3.9K 1/10W	[M]
R723	ERJ3GEYJ151V	150 1/16W	[M]
R724	ERJ3GEYJ153V	15K 1/16W	[M]
R725	ERJ3GEYJ272V	2.7K 1/16W	[M]
R726	ERJ3GEYJ472V	4.7K 1/16W	[M]
R727	ERJ3GEYJ153V	15K 1/16W	[M]
R728	ERJ6RBD222V	2.2K 1/10W	[M]
R729	ERJ6GEYJ470V	47 1/10W	[M]
R730	ERJ3GEYJ223V	22K 1/16W	[M]
R731	ERJ6RBD273V	27K 1/10W	[M]
R732	ERJ3GEYJ223V	22K 1/16W	[M]
R734	ERJ3GEYJ102V	1K 1/16W	[M]
R735	ERJ8GEYJ220V	22 1/8W	[M]
R736	ERJ8GEYJ333V	33K 1/8W	[M]
R737	ERJ8GEYJ333V	33K 1/8W	[M]
R738	ERJ3GEYJ153V	15K 1/16W	[M]
R739	ERJ6GEYJ101V	100 1/10W	[M]
R740	ERJ3GEYJ273V	27K 1/16W	[M]
R741	ERJ6GEYJ122V	1.2K 1/10W	[M]
R742	ERJ6GEYJ473V	47K 1/10W	[M]
R743	ERJ6GEYJ472V	4.7K 1/10W	[M]
R744	ERJ6GEYJ102V	1K 1/10W	[M]
R745	ERJ6GEYJ102V	1K 1/10W	[M]
R746	ERJ6GEYJ122V	1.2K 1/10W	[M]
R747	ERX2SZJR12P	0.12 2W	[M]
R749	ERJ6GEYF272V	2.7K 1/10W	[M]
R750	ERJ6GEYJ222V	2.2K 1/10W	[M]
R751	ERJ6GEYJ101V	100 1/10W	[M]
R753	ERJ3GEYJ223V	22K 1/16W	[M]
R755	ERJ3GEYJ153V	15K 1/16W	[M]
R756	ERJ3GEYF222V	2.2K 1/16W	[M]
R757	ERJ3GEYF273V	27K 1/16W	[M]
R758	ERJ3GEYJ101V	100 1/16W	[M]
R760	ERJ3GEYJ123V	12K 1/16W	[M]
R761	ERDS1FVJ561T	560 1/2W	[M]
R762	ERDS1FVJ1R2T	1.2 1/2W	[M]
R764	ERJ3GEYJ562V	5.6K 1/16W	[M]
R765	ERJ3GEYJ470V	47 1/16W	[M]
R766	ERJ3GEYJ473V	47K 1/16W	[M]
R767	ERJ3GEYF104V	100K 1/16W	[M]
R768	ERJ6RBD222V	2.2K 1/10W	[M]
R770	ERJ3GEYJ223V	22K 1/16W	[M]
R771	ERJ6RBD561V	560 1/10W	[M]
R772	ERJ6RBD103V	10K 1/10W	[M]
R773	ERJ3GEYJ334V	330K 1/16W	[M]
R774	ERJ3GEYJ102V	1K 1/16W	[M]
R775	ERJ6RBD821V	820 1/10W	[M]
R776	ERJ3GEYJ223V	22K 1/16W	[M]
R777	ERJ6RBD562V	5.6K 1/10W	[M]
R778	ERJ3GEYJ223V	22K 1/16W	[M]
R780	ERJ3GEYJ334V	330K 1/16W	[M]
R781	ERJ6RBD222V	2.2K 1/10W	[M]
R786	ERDS1FVJ2R2T	2.2 1/2W	[M]
R787	ERJ6GEYJ104V	100K 1/10W	[M]
R788	ERJ6GEY0R00V	0 1/10W	[M]
R789	ERG2SJ333P	33K 2W	[M]
R790	ERJ3GEYJ473V	47K 1/16W	[M]
R791	ERJ3GEYJ103V	10K 1/16W	[M]
R792	ERJ6GEYF102V	1K 1/10W	[M]
R793	ERJ6GEYJ471V	470 1/10W	[M]
R794	ERJ3GEYJ1R5V	1.5 1/16W	[M]
R795	ERJ3GEYJ101V	100 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R801	ERJ3GEYJ561V	560 1/16W	[M]
R802	ERJ3GEYJ104V	100K 1/16W	[M]
R803	ERJ3GEY0R00V	0 1/16W	[M]
R804	ERJ3GEY0R00V	0 1/16W	[M]
R805	ERJ3GEYJ680V	68 1/16W	[M]
R806	ERJ3GEYJ680V	68 1/16W	[M]
R807	ERJ3GEYJ102V	1K 1/16W	[M]
R808	ERJ3GEYJ563V	56K 1/16W	[M]
R811	ERJ3GEYJ101V	100 1/16W	[M]
R812	ERJ3GEYJ470V	47 1/16W	[M]
R815	ERJ3GEYJ223V	22K 1/16W	[M]
R816	ERJ3GEYJ223V	22K 1/16W	[M]
R818	ERJ3GEYJ102V	1K 1/16W	[M]
R819	ERJ8GEYJ561V	560 1/8W	[M]
R821	ERJ3GEYJ122V	1.2K 1/16W	[M]
R822	ERJ3GEYJ152V	1.5K 1/16W	[M]
R823	ERJ3GEYJ222V	2.2K 1/16W	[M]
R824	ERJ3GEYJ332V	3.3K 1/16W	[M]
R825	ERJ3GEYJ472V	4.7K 1/16W	[M]
R827	ERJ3GEYJ122V	1.2K 1/16W	[M]
R828	ERJ3GEYJ152V	1.5K 1/16W	[M]
R831	ERJ3GEYJ102V	1K 1/16W	[M]
R832	ERJ3GEYJ102V	1K 1/16W	[M]
R833	ERJ3GEY0R00V	0 1/16W	[M]
R841	ERJ3GEYJ102V	1K 1/16W	[M]
R842	ERJ3GEYJ102V	1K 1/16W	[M]
R851	ERJ3GEYJ102V	1K 1/16W	[M]
R853	ERJ3GEYJ332V	3.3K 1/16W	[M]
R854	ERJ3GEYJ562V	5.6K 1/16W	[M]
R855	ERJ3GEYJ102V	1K 1/16W	[M]
R856	ERJ3GEYJ102V	1K 1/16W	[M]
R857	ERJ3GEYJ332V	3.3K 1/16W	[M]
R858	ERJ3GEYJ562V	5.6K 1/16W	[M]
R860	ERJ3GEYJ102V	1K 1/16W	[M]
R861	ERJ3GEYJ102V	1K 1/16W	[M]
R863	ERJ3GEYJ332V	3.3K 1/16W	[M]
R864	ERJ3GEYJ562V	5.6K 1/16W	[M]
R865	ERJ3GEYJ102V	1K 1/16W	[M]
R866	ERJ3GEYJ102V	1K 1/16W	[M]
R867	ERJ3GEYJ332V	3.3K 1/16W	[M]
R868	ERJ3GEYJ562V	5.6K 1/16W	[M]
R870	ERJ3GEYJ102V	1K 1/16W	[M]
R871	ERJ3GEYJ102V	1K 1/16W	[M]
R873	ERJ3GEYJ332V	3.3K 1/16W	[M]
R874	ERJ3GEYJ562V	5.6K 1/16W	[M]
R875	ERJ3GEYJ102V	1K 1/16W	[M]
R876	ERJ3GEYJ102V	1K 1/16W	[M]
R877	ERJ3GEYJ332V	3.3K 1/16W	[M]
R878	ERJ3GEYJ562V	5.6K 1/16W	[M]
R880	ERJ3GEYJ102V	1K 1/16W	[M]
R881	ERJ3GEYJ102V	1K 1/16W	[M]
R883	ERJ3GEYJ332V	3.3K 1/16W	[M]
R884	ERJ3GEYJ562V	5.6K 1/16W	[M]
R885	ERJ3GEYJ102V	1K 1/16W	[M]
R886	ERJ3GEYJ102V	1K 1/16W	[M]
R887	ERJ3GEYJ332V	3.3K 1/16W	[M]
R888	ERJ3GEYJ562V	5.6K 1/16W	[M]
R890	ERJ3GEYJ102V	1K 1/16W	[M]
R891	ERJ3GEYJ155V	1.5M 1/16W	[M]
R892	ERJ3GEYJ125V	1.2M 1/16W	[M]
R893	ERJ3GEYJ224V	220K 1/16W	[M]
R894	ERJ3GEYJ224V	220K 1/16W	[M]
R895	ERJ3GEYJ224V	220K 1/16W	[M]
R896	ERJ3GEYJ224V	220K 1/16W	[M]
R897	ERJ3RBD333V	33K 3W	[M]
R898	ERJ3RBD333V	33K 3W	[M]
R899	ERJ3GEYJ183V	18K 1/16W	[M]
R902	ERJ3GEYJ102V	1K 1/16W	[M]
R903	ERJ3GEYJ102V	1K 1/16W	[M]
R904	ERJ3GEYJ223V	22K 1/16W	[M]
R905	ERJ3GEYJ223V	22K 1/16W	[M]
R906	ERJ3GEYJ182V	1.8K 1/16W	[M]
R907	ERJ3GEYJ182V	1.8K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R908	ERJ3GEYJ223V	22K 1/16W	[M]
R909	ERJ3GEYJ103V	10K 1/16W	[M]
R910	ERJ3GEYJ471V	470 1/16W	[M]
R911	ERJ3GEYJ223V	22K 1/16W	[M]
R914	ERJ3GEYJ102V	1K 1/16W	[M]
R915	ERJ3GEYJ102V	1K 1/16W	[M]
R916	ERJ3GEYJ562V	5.6K 1/16W	[M]
R917	ERJ3GEYJ562V	5.6K 1/16W	[M]
R918	ERJ3GEYJ182V	1.8K 1/16W	[M]
R919	ERJ3GEYJ182V	1.8K 1/16W	[M]
R928	ERJ3GEYJ153V	15K 1/16W	[M]
R929	ERJ3GEYJ153V	15K 1/16W	[M]
R930	ERJ3GEYJ102V	1K 1/16W	[M]
R931	ERJ3GEYJ102V	1K 1/16W	[M]
R932	ERJ3GEYJ472V	4.7K 1/16W	[M]
R933	ERJ3GEYJ473V	47K 1/16W	[M]
R934	ERG1SJ470E	47 1W	[M]
R935	ERG1SJ470E	47 1W	[M]
R936	ERJ3GEYJ223V	22K 1/16W	[M]
R976	ERJ3GEYF750V	75 1/16W	[M]
R977	ERJ3GEYF750V	75 1/16W	[M]
R978	ERJ3GEYJ750V	75 1/16W	[M]
R979	ERJ3GEYJ750V	75 1/16W	[M]
R980	ERJ3GEYJ472V	4.7K 1/16W	[M]
R981	ERJ3GEYJ472V	4.7K 1/16W	[M]
R982	ERJ3GEYJ822V	8.2K 1/16W	[M]
R983	ERJ3GEYJ822V	8.2K 1/16W	[M]
R984	ERJ3GEYJ472V	4.7K 1/16W	[M]
R985	ERJ3GEYJ472V	4.7K 1/16W	[M]
R986	ERJ3GEYJ822V	8.2K 1/16W	[M]
R987	ERJ3GEYJ822V	8.2K 1/16W	[M]
R991	ERJ3GEYJ333V	33K 1/16W	[M]
R992	ERJ3GEYJ333V	33K 1/16W	[M]
R993	ERJ3GEYJ333V	33K 1/16W	[M]
R994	ERJ3GEYJ101V	100 1/16W	[M]
R995	ERJ3GEYJ101V	100 1/16W	[M]
R996	ERJ3GEYJ101V	100 1/16W	[M]
R997	ERJ3GEYJ101V	100 1/16W	[M]
R998	ERJ3GEYJ101V	100 1/16W	[M]
R999	ERJ3GEYJ103V	10K 1/16W	[M]
R1114	ERJ2GEJ475X	4.7M 1/32W	[M]
R1115	ERJ2GE0R00X	0 1/32W	[M]
R1116	ERJ2RHD1202X	12 1/32W	[M]
R1117	ERJ2GE0R00X	0 1/32W	[M]
R1118	ERJ2GEJ102X	1K 1/32W	[M]
R1119	ERJ2GEJ330X	33 1/32W	[M]
R1120	ERJ2GEJ330X	33 1/32W	[M]
R1121	ERJ2GEJ330X	33 1/32W	[M]
R1122	ERJ2RHD1242X	120K 1/32W	[M]
R1123	ERJ2GE0R00X	0 1/32W	[M]
R1125	ERJ2GEJ330X	33 1/32W	[M]
R1128	ERJ2GEJ105X	1M 1/32W	[M]
R1136	ERJ2GEJ103X	10K 1/32W	[M]
R1141	D1BD10R0A008	0 1/16W	[M]
R1142	D1BD49R9A030	9.9 1/16W	[M]
R1143	D1BD49R9A030	9.9 1/16W	[M]
R1146	J0JCC0000103	INDUCTOR	[M]
R1200	ERJ2GEJ103X	10K 1/32W	[M]
R1201	ERJ2GEJ330X	33 1/32W	[M]
R1203	ERJ2GE0R00X	0 1/32W	[M]
R1210	ERJ2GEJ103X	10K 1/32W	[M]
R1211	ERJ2GEJ562X	5.6K 1/32W	[M]
R1212	ERJ2GEJ472X	4.7K 1/32W	[M]
R1213	ERJ2GEJ820X	82 1/32W	[M]
R1214	ERJ2GEJ820X	82 1/32W	[M]
R1215	ERJ2GEJ820X	82 1/32W	[M]
R1216	ERJ2GEJ220X	22 1/32W	[M]
R1217	ERJ2GEJ220X	22 1/32W	[M]
R1218	ERJ2GEJ220X	22 1/32W	[M]
R1219	ERJ2GEJ330X	33 1/32W	[M]
R1220	ERJ2GEJ330X	33 1/32W	[M]
R1221	ERJ2GEJ330X	33 1/32W	[M]
R1222	ERJ2GEJ330X	33 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1223	ERJ2GEJ330X	33 1/32W	[M]
R1224	ERJ2GEJ330X	33 1/32W	[M]
R1225	ERJ2GEJ102X	1K 1/32W	[M]
R1235	ERJ2GEJ103X	10K 1/32W	[M]
R1237	ERJ2GE0R00X	0 1/32W	[M]
R1238	ERJ2GEJ183X	18K 1/32W	[M]
R1239	ERJ2GEJ183X	18K 1/32W	[M]
R1240	ERJ2GEJ103X	10K 1/32W	[M]
R1400	ERJ2GEJ102X	1K 1/32W	[M]
R1402	ERJ2GEJ103X	10K 1/32W	[M]
R1405	ERJ2GEJ103X	10K 1/32W	[M]
R1502	ERJ2GEJ473X	47K 1/32W	[M]
R1505	ERJ2GEJ330X	33 1/32W	[M]
R1507	ERJ2GEJ472X	4.7K 1/32W	[M]
R1508	ERJ2GEJ472X	4.7K 1/32W	[M]
R1509	ERJ2GEJ472X	4.7K 1/32W	[M]
R1510	ERJ2GEJ330X	33 1/32W	[M]
R1511	ERJ2GEJ330X	33 1/32W	[M]
R1512	ERJ2GEJ330X	33 1/32W	[M]
R1513	ERJ2GEJ330X	33 1/32W	[M]
R1514	ERJ2GEJ330X	33 1/32W	[M]
R1515	ERJ2GEJ103X	10K 1/32W	[M]
R1516	ERJ2GEJ330X	33 1/32W	[M]
R1517	ERJ2GEJ330X	33 1/32W	[M]
R1518	ERJ2GEJ330X	33 1/32W	[M]
R1519	ERJ2GEJ330X	33 1/32W	[M]
R1520	ERJ2GEJ330X	33 1/32W	[M]
R1521	ERJ2GEJ330X	33 1/32W	[M]
R1522	ERJ2GEJ330X	33 1/32W	[M]
R1523	ERJ2GEJ103X	10K 1/32W	[M]
R1524	ERJ2GEJ330X	33 1/32W	[M]
R1525	ERJ2GEJ330X	33 1/32W	[M]
R1527	ERJ2GE0R00X	0 1/32W	[M]
R1528	ERJ2GEJ330X	33 1/32W	[M]
R1529	ERJ2GE0R00X	0 1/32W	[M]
R1530	ERJ2GEJ103X	10K 1/32W	[M]
R1531	ERJ2GEJ103X	10K 1/32W	[M]
R1532	ERJ2GEJ330X	33 1/32W	[M]
R1533	ERJ2GEJ330X	33 1/32W	[M]
R1534	ERJ2GEJ472X	4.7K 1/32W	[M]
R1535	ERJ2GEJ330X	33 1/32W	[M]
R1536	ERJ2GEJ103X	10K 1/32W	[M]
R1537	ERJ2GEJ103X	10K 1/32W	[M]
R1538	ERJ2GEJ330X	33 1/32W	[M]
R1539	ERJ2GEJ330X	33 1/32W	[M]
R1540	ERJ2GEJ102X	1K 1/32W	[M]
R1541	ERJ2GEJ103X	10K 1/32W	[M]
R1542	ERJ2GEJ103X	10K 1/32W	[M]
R1543	ERJ2GEJ103X	10K 1/32W	[M]
R1544	ERJ2GEJ103X	10K 1/32W	[M]
R1546	ERJ2GEJ330X	33 1/32W	[M]
R1547	ERJ2GEJ330X	33 1/32W	[M]
R1548	ERJ2GEJ330X	33 1/32W	[M]
R1549	ERJ2GEJ330X	33 1/32W	[M]
R1550	ERJ2GEJ152X	1.5K 1/32W	[M]
R1551	ERJ2GEJ152X	1.5K 1/32W	[M]
R1552	ERJ2GEJ152X	1.5K 1/32W	[M]
R1553	ERJ2GEJ152X	1.5K 1/32W	[M]
R1554	ERJ2GEJ330X	33 1/32W	[M]
R1555	ERJ2GEJ330X	33 1/32W	[M]
R1556	ERJ2GEJ330X	33 1/32W	[M]
R1557	ERJ2GEJ103X	10K 1/32W	[M]
R1558	ERJ2GEJ103X	10K 1/32W	[M]
R1559	ERJ2GEJ330X	33 1/32W	[M]
R1560	ERJ2GEJ103X	10K 1/32W	[M]
R1561	ERJ2GEJ103X	10K 1/32W	[M]
R1562	ERJ2GEJ103X	10K 1/32W	[M]
R1564	ERJ2GEJ330X	33 1/32W	[M]
R1565	ERJ2GEJ330X	33 1/32W	[M]
R1566	ERJ2GEJ102X	1K 1/32W	[M]
R1567	ERJ2GEJ221X	220 1/32W	[M]
R1568	ERJ2GEJ103X	10K 1/32W	[M]
R1569	ERJ2GEJ330X	33 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1571	ERJ2GEJ330X	33 1/32W	[M]
R1572	ERJ2GEJ103X	10K 1/32W	[M]
R1573	ERJ2GEJ101X	100 1/32W	[M]
R1574	ERJ2GEJ101X	100 1/32W	[M]
R1575	ERJ2GEJ330X	33 1/32W	[M]
R1576	ERJ2GEJ330X	33 1/32W	[M]
R1577	ERJ2GEJ103X	10K 1/32W	[M]
R1578	ERJ2GEJ103X	10K 1/32W	[M]
R1579	ERJ2GEJ330X	33 1/32W	[M]
R1580	ERJ2GEJ330X	33 1/32W	[M]
R1582	ERJ2GEJ103X	10K 1/32W	[M]
R1583	ERJ2GEJ103X	10K 1/32W	[M]
R1586	ERJ2GEJ103X	10K 1/32W	[M]
R1587	ERJ2GEJ103X	10K 1/32W	[M]
R1588	ERJ2GEJ103X	10K 1/32W	[M]
R1589	ERJ2GEJ103X	10K 1/32W	[M]
R1590	ERJ2GE0R00X	0 1/32W	[M]
R1594	ERJ2GEJ103X	10K 1/32W	[M]
R1595	ERJ2GEJ330X	33 1/32W	[M]
R1596	ERJ2GEJ330X	33 1/32W	[M]
R1597	ERJ2GEJ102X	1K 1/32W	[M]
R1599	ERJ2GE0R00X	0 1/32W	[M]
R1601	ERJ2GEJ330X	33 1/32W	[M]
R1602	ERJ2GEJ330X	33 1/32W	[M]
R1604	ERJ2GEJ330X	33 1/32W	[M]
R1606	ERJ2GEJ330X	33 1/32W	[M]
R1607	ERJ2GEJ330X	33 1/32W	[M]
R1609	ERJ2GEJ330X	33 1/32W	[M]
R1610	ERJ2GEJ330X	33 1/32W	[M]
R1611	ERJ2GEJ330X	33 1/32W	[M]
R1614	ERJ2GEJ330X	33 1/32W	[M]
R1620	ERJ2GEJ103X	10K 1/32W	[M]
R1630	ERJ2GEJ102X	1K 1/32W	[M]
R1640	ERJ2GEJ330X	33 1/32W	[M]
R1651	ERJ2GEJ330X	33 1/32W	[M]
R1668	ERJ2GEJ330X	33 1/32W	[M]
R1669	ERJ2GEJ330X	33 1/32W	[M]
R1670	ERJ2GEJ330X	33 1/32W	[M]
R1672	ERJ2GEJ330X	33 1/32W	[M]
R1676	ERJ2GEJ330X	33 1/32W	[M]
R1679	ERJ2GEJ330X	33 1/32W	[M]
R1680	ERJ2GEJ330X	33 1/32W	[M]
R1685	ERJ2GEJ330X	33 1/32W	[M]
R1687	ERJ2GEJ330X	33 1/32W	[M]
R1688	ERJ2GEJ330X	33 1/32W	[M]
R1691	ERJ2GEJ330X	33 1/32W	[M]
R1692	ERJ2GEJ330X	33 1/32W	[M]
R1693	ERJ2GEJ330X	33 1/32W	[M]
R1694	ERJ2GEJ330X	33 1/32W	[M]
R1696	ERJ2GEJ330X	33 1/32W	[M]
R1800	ERJ2GEJ104X	100K 1/32W	[M]
R1801	ERJ2GE0R00X	0 1/32W	[M]
R1802	ERJ2GEJ333X	33K 1/32W	[M]
R1803	ERJ2GEJ104X	100K 1/32W	[M]
R1804	ERJ2GEJ470X	47 1/32W	[M]
R1805	ERJ2GEJ470X	47 1/32W	[M]
R1806	ERJ2GEJ470X	47 1/32W	[M]
R1807	ERJ2GEJ333X	33K 1/32W	[M]
R1808	ERJ2GEJ470X	47 1/32W	[M]
R1809	ERJ2GEJ470X	47 1/32W	[M]
R1811	ERJ2GE0R00X	0 1/32W	[M]
R1812	ERJ2GE0R00X	0 1/32W	[M]
R1813	ERJ2GEJ220X	22 1/32W	[M]
R1814	ERJ2GEJ101X	100 1/32W	[M]
R1815	ERJ2GEJ105X	1M 1/32W	[M]
R1816	ERJ2GEJ220X	22 1/32W	[M]
R1818	ERJ2GEJ333X	33K 1/32W	[M]
R1819	ERJ2GEJ105X	1M 1/32W	[M]
R1820	ERJ2GEJ333X	33K 1/32W	[M]
R1823	ERJ2GEJ101X	100 1/32W	[M]
R1825	ERJ2GEJ473X	47K 1/32W	[M]
R1826	ERJ2GEJ473X	47K 1/32W	[M]
R1827	ERJ2GEJ473X	47K 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1828	ERJ2GEJ220X	22 1/32W	[M]
R1829	ERJ2GEJ220X	22 1/32W	[M]
R1830	ERJ2GEJ220X	22 1/32W	[M]
R1831	ERJ2GEJ220X	22 1/32W	[M]
R1832	ERJ2GEJ103X	10K 1/32W	[M]
R1900	ERJ2GEJ330X	33 1/32W	[M]
R1901	ERJ2GEJ330X	33 1/32W	[M]
R1902	ERJ2GEJ330X	33 1/32W	[M]
R1903	ERJ2GEJ330X	33 1/32W	[M]
R1904	ERJ2GEJ103X	10K 1/32W	[M]
R1905	ERJ2GEJ103X	10K 1/32W	[M]
R1906	ERJ2GEJ103X	10K 1/32W	[M]
R1907	ERJ2GEJ103X	10K 1/32W	[M]
R1908	ERJ2GEJ103X	10K 1/32W	[M]
R1909	ERJ2GEJ391X	390 1/32W	[M]
R1910	ERJ2GEJ101X	100 1/32W	[M]
R1911	ERJ2GEJ101X	100 1/32W	[M]
R1912	ERJ2GEJ102X	1K 1/32W	[M]
R1913	ERJ2GEJ102X	1K 1/32W	[M]
R1914	ERJ2GEJ103X	10K 1/32W	[M]
R1915	ERJ2GEJ105X	1M 1/32W	[M]
R1916	ERJ2GEJ101X	100 1/32W	[M]
R1917	ERJ2GEJ102X	1K 1/32W	[M]
R1918	ERJ2GEJ391X	390 1/32W	[M]
R1919	ERJ2GEJ330X	33 1/32W	[M]
R1920	ERJ2GEJ101X	100 1/32W	[M]
R1921	ERJ2GEJ101X	100 1/32W	[M]
R1922	ERJ2GEJ391X	390 1/32W	[M]
R1923	ERJ2GEJ101X	100 1/32W	[M]
R1924	ERJ2GEJ105X	1M 1/32W	[M]
R1925	ERJ2GEJ102X	1K 1/32W	[M]
R1926	ERJ2GEJ330X	33 1/32W	[M]
R1930	ERJ2GEJ103X	10K 1/32W	[M]
R1936	ERJ2GEJ103X	10K 1/32W	[M]
R1982	ERJ2GEJ330X	33 1/32W	[M]
R2003	D1BD49R9A030	9.9 1/16W	[M]
R2004	D1BD49R9A030	9.9 1/16W	[M]
R3001	ERJ2GEJ220X	22 1/32W	[M]
R3002	ERJ2GEJ220X	22 1/32W	[M]
R3003	ERJ2GEJ220X	22 1/32W	[M]
R3004	ERJ2GEJ220X	22 1/32W	[M]
R3011	ERJ2GEJ472X	4.7K 1/32W	[M]
R3012	ERJ2GEJ472X	4.7K 1/32W	[M]
R3013	ERJ2GEJ472X	4.7K 1/32W	[M]
R3014	ERJ2GEJ472X	4.7K 1/32W	[M]
R3015	ERJ2GEJ472X	4.7K 1/32W	[M]
R3016	ERJ2GEJ101X	100 1/32W	[M]
R3017	ERJ2GEJ101X	100 1/32W	[M]
R3018	ERJ2GEJ101X	100 1/32W	[M]
R3019	ERJ2GEJ220X	22 1/32W	[M]
R3020	ERJ2GEJ220X	22 1/32W	[M]
R3022	ERJ2GEJ220X	22 1/32W	[M]
R3023	ERJ2GEJ220X	22 1/32W	[M]
R3024	ERJ2GEJ220X	22 1/32W	[M]
R3025	ERJ2GEJ220X	22 1/32W	[M]
R3026	ERJ2GEJ220X	22 1/32W	[M]
R3027	ERJ2GEJ220X	22 1/32W	[M]
R3028	ERJ2GEJ220X	22 1/32W	[M]
R3029	ERJ2GEJ220X	22 1/32W	[M]
R3030	ERJ2GEJ220X	22 1/32W	[M]
R3031	ERJ2GEJ220X	22 1/32W	[M]
R3032	ERJ2GEJ220X	22 1/32W	[M]
R3033	ERJ2GEJ220X	22 1/32W	[M]
R3034	ERJ2GEJ220X	22 1/32W	[M]
R3035	ERJ2GEJ220X	22 1/32W	[M]
R3036	ERJ2GEJ220X	22 1/32W	[M]
R3037	ERJ2GEJ220X	22 1/32W	[M]
R3038	ERJ2GEJ220X	22 1/32W	[M]
R3039	ERJ2GEJ220X	22 1/32W	[M]
R3040	ERJ2GEJ220X	22 1/32W	[M]
R3041	ERJ2GEJ220X	22 1/32W	[M]
R3042	ERJ2GEJ101X	100 1/32W	[M]
R3043	ERJ2GEJ101X	100 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R3045	ERJ2GEJ220X	22 1/32W	[M]
R3046	ERJ2GEJ220X	22 1/32W	[M]
R3047	ERJ2GEJ472X	4.7K 1/32W	[M]
R3052	ERJ2GE0R00X	0 1/32W	[M]
R3053	ERJ2GE0R00X	0 1/32W	[M]
R3054	ERJ2GE0R00X	0 1/32W	[M]
R3062	ERJ2GEJ220X	22 1/32W	[M]
R3063	ERJ2GEJ220X	22 1/32W	[M]
R3064	ERJ2GEJ220X	22 1/32W	[M]
R3065	ERJ2GEJ220X	22 1/32W	[M]
R3066	ERJ2GEJ220X	22 1/32W	[M]
R3067	ERJ2GEJ220X	22 1/32W	[M]
R3068	ERJ2GEJ220X	22 1/32W	[M]
R3069	ERJ2GEJ220X	22 1/32W	[M]
R3070	ERJ2GEJ220X	22 1/32W	[M]
R3071	ERJ2GEJ220X	22 1/32W	[M]
R3072	ERJ2GEJ220X	22 1/32W	[M]
R3073	ERJ2GEJ220X	22 1/32W	[M]
R3074	ERJ2GEJ220X	22 1/32W	[M]
R3075	ERJ2GEJ220X	22 1/32W	[M]
R3076	ERJ2GEJ220X	22 1/32W	[M]
R3077	ERJ2GEJ220X	22 1/32W	[M]
R3078	ERJ2GEJ220X	22 1/32W	[M]
R3079	ERJ2GEJ220X	22 1/32W	[M]
R3080	ERJ2GEJ220X	22 1/32W	[M]
R3081	ERJ2GEJ220X	22 1/32W	[M]
R3082	ERJ2GEJ220X	22 1/32W	[M]
R3083	ERJ2GEJ220X	22 1/32W	[M]
R3084	ERJ2GEJ220X	22 1/32W	[M]
R3085	ERJ2GEJ220X	22 1/32W	[M]
R3086	ERJ2GEJ220X	22 1/32W	[M]
R3087	ERJ2GEJ220X	22 1/32W	[M]
R3088	ERJ2GEJ220X	22 1/32W	[M]
R3089	ERJ2GEJ220X	22 1/32W	[M]
R3090	ERJ2GEJ220X	22 1/32W	[M]
R3091	ERJ2GEJ220X	22 1/32W	[M]
R3092	ERJ2GEJ220X	22 1/32W	[M]
R3093	ERJ2GEJ220X	22 1/32W	[M]
R3094	ERJ2GEJ220X	22 1/32W	[M]
R3095	ERJ2GEJ220X	22 1/32W	[M]
R3096	ERJ2GEJ220X	22 1/32W	[M]
R3097	ERJ2GEJ220X	22 1/32W	[M]
R3098	ERJ2GEJ220X	22 1/32W	[M]
R3099	ERJ2GEJ220X	22 1/32W	[M]
R3100	ERJ2GEJ220X	22 1/32W	[M]
R3108	ERJ2GEJ220X	22 1/32W	[M]
R3109	ERJ2GEJ220X	22 1/32W	[M]
R3110	ERJ2GEJ220X	22 1/32W	[M]
R3111	ERJ2GEJ220X	22 1/32W	[M]
R3115	ERJ2GEJ101X	100 1/32W	[M]
R3116	ERJ2GEJ101X	100 1/32W	[M]
R3117	ERJ2GEJ220X	22 1/32W	[M]
R3118	ERJ2GEJ220X	22 1/32W	[M]
R3119	ERJ2GEJ220X	22 1/32W	[M]
R3120	ERJ2GEJ220X	22 1/32W	[M]
R3121	ERJ2GEJ220X	22 1/32W	[M]
R3122	ERJ2GEJ220X	22 1/32W	[M]
R3123	ERJ2GEJ220X	22 1/32W	[M]
R3124	ERJ2GEJ220X	22 1/32W	[M]
R3125	ERJ2GEJ220X	22 1/32W	[M]
R3126	ERJ2GEJ220X	22 1/32W	[M]
R3132	ERJ2GEJ472X	4.7K 1/32W	[M]
R3134	ERJ2GEJ101X	100 1/32W	[M]
R3135	ERJ2GEJ331X	330 1/32W	[M]
R3136	ERJ2GEJ472X	4.7K 1/32W	[M]
R3137	ERJ2GEJ472X	4.7K 1/32W	[M]
R3138	ERJ2GEJ472X	4.7K 1/32W	[M]
R3145	ERJ2GEJ472X	4.7K 1/32W	[M]
R3153	ERJ2GEJ472X	4.7K 1/32W	[M]
R3159	ERJ2GE0R00X	0 1/32W	[M]
R3161	ERJ2GE0R00X	0 1/32W	[M]
R3163	ERJ2GEJ472X	4.7K 1/32W	[M]
R3165	ERJ2GEJ103X	10K 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R3166	ERJ2GEJ103X	10K 1/32W	[M]
R3167	ERJ2GEJ330X	33 1/32W	[M]
R3175	ERJ2GEJ220X	22 1/32W	[M]
R3176	ERJ2GEJ220X	22 1/32W	[M]
R3177	ERJ2GEJ220X	22 1/32W	[M]
R3178	ERJ2GEJ220X	22 1/32W	[M]
R3179	ERJ2GEJ104X	100K 1/32W	[M]
R3180	ERJ2GEJ102X	1K 1/32W	[M]
R3182	ERJ2GEJ471X	470 1/32W	[M]
R3201	ERJ2GEJ681X	680 1/32W	[M]
R3202	ERJ2RHD272X	2.7K 1/32W	[M]
R3203	ERJ2RHD561X	560 1/32W	[M]
R3205	ERJ2GEJ101X	100 1/32W	[M]
R3208	ERJ2GEJ103X	10K 1/32W	[M]
R3209	ERJ2GEJ103X	10K 1/32W	[M]
R3210	ERJ2GEJ103X	10K 1/32W	[M]
R3211	ERJ2RHD331X	330 1/32W	[M]
R3212	ERJ2GEJ330X	33 1/32W	[M]
R3213	ERJ2GEJ102X	1K 1/32W	[M]
R3214	ERJ2GEJ103X	10K 1/32W	[M]
R3215	ERJ2GEJ103X	10K 1/32W	[M]
R3216	ERJ2RHD331X	330 1/32W	[M]
R3217	ERJ2GEJ330X	33 1/32W	[M]
R3218	ERJ2GEJ102X	1K 1/32W	[M]
R3219	ERJ2RHD272X	2.7K 1/32W	[M]
R3220	ERJ2RHD561X	560 1/32W	[M]
R3221	ERJ2GE0R00X	0 1/32W	[M]
R3222	ERJ2RHD331X	330 1/32W	[M]
R3223	ERJ2GEJ330X	33 1/32W	[M]
R3224	ERJ2GEJ102X	1K 1/32W	[M]
R3225	ERJ2GE0R00X	0 1/32W	[M]
R3226	ERJ2GE0R00X	0 1/32W	[M]
R3227	ERJ2GE0R00X	0 1/32W	[M]
R3228	ERJ2GE0R00X	0 1/32W	[M]
R3229	ERJ2GEJ101X	100 1/32W	[M]
R3231	ERJ2RHD331X	330 1/32W	[M]
R3232	ERJ2GEJ330X	33 1/32W	[M]
R3233	ERJ2GEJ102X	1K 1/32W	[M]
R3235	ERJ2RHD331X	330 1/32W	[M]
R3236	ERJ2GEJ330X	33 1/32W	[M]
R3237	ERJ2GEJ102X	1K 1/32W	[M]
R3239	ERJ2RHD331X	330 1/32W	[M]
R3240	ERJ2GE0R00X	0 1/32W	[M]
R3241	ERJ2GEJ330X	33 1/32W	[M]
R3242	ERJ2GEJ102X	1K 1/32W	[M]
R3261	ERJ2GEJ103X	10K 1/32W	[M]
R3262	ERJ2GEJ103X	10K 1/32W	[M]
R3901	ERJ2GEJ511X	510 1/32W	[M]
R3902	ERJ2GEJ103X	10K 1/32W	[M]
R3903	ERJ2GEJ103X	10K 1/32W	[M]
R3904	ERJ2GEJ472X	4.7K 1/32W	[M]
R3905	ERJ2GEJ222X	2.2K 1/32W	[M]
R3906	ERJ2GEJ472X	4.7K 1/32W	[M]
R3907	ERJ2GEJ222X	2.2K 1/32W	[M]
R3909	ERJ2GE0R00X	0 1/32W	[M]
R3910	ERJ2GEJ103X	10K 1/32W	[M]
R3941	ERJ2GEJ273X	27K 1/32W	[M]
R3942	ERJ2GEJ224X	220K 1/32W	[M]
R3943	ERJ2GEJ104X	100K 1/32W	[M]
R3944	ERJ2GEJ221X	220 1/32W	[M]
R3947	ERJ2GEJ103X	10K 1/32W	[M]
R3951	ERJ2GE0R00X	0 1/32W	[M]
R3952	ERJ2GE0R00X	0 1/32W	[M]
R3953	ERJ2GE0R00X	0 1/32W	[M]
R3954	ERJ2GE0R00X	0 1/32W	[M]
R3955	ERJ2GE0R00X	0 1/32W	[M]
R3956	ERJ2GE0R00X	0 1/32W	[M]
R3957	ERJ3GEYJ331V	330 1/16W	[M]
R5009	ERJ3GEYJ152V	1.5K 1/16W	[M]
R5010	ERJ3GEYJ152V	1.5K 1/16W	[M]
R5011	ERJ3GEYJ331V	330 1/16W	[M]
R5012	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5020	ERJ3GEYJ473V	47K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5021	ERJ3GEYJ221V	220 1/16W	[M]
R5022	ERJ6GEYJ820V	82 1/10W	[M]
R5023	ERJ6GEYJ820V	82 1/10W	[M]
R5024	ERJ3GEYJ102V	1K 1/16W	[M]
R5025	ERJ3GEYJ102V	1K 1/16W	[M]
R5026	ERJ3GEYJ473V	47K 1/16W	[M]
R5027	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5028	ERJ3GEYJ104V	100K 1/16W	[M]
R5029	ERJ3GEYJ104V	100K 1/16W	[M]
R5030	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5031	ERJ3GEYJ473V	47K 1/16W	[M]
R5100	ERJ3RED334V	330K 3W	[M]
R5101	ERJ3RED224V	220K 3W	[M]
R8003	ERJ2GEJ103X	10K 1/32W	[M]
R8006	ERJ2GEJ103X	10K 1/32W	[M]
R8009	ERJ2GEJ103X	10K 1/32W	[M]
R8010	ERJ2GEJ103X	10K 1/32W	[M]
R8011	ERJ2GEJ220X	22 1/32W	[M]
R8012	ERJ2GEJ220X	22 1/32W	[M]
R8013	ERJ2GEJ220X	22 1/32W	[M]
R8014	ERJ2GEJ103X	10K 1/32W	[M]
R8025	ERJ3GEY0R00V	0 1/16W	[M]
R8041	ERJ2GEJ330X	33 1/32W	[M]
R8153	ERJ2RHD621X	620 1/32W	[M]
R8154	ERJ2RHD102X	1K 1/32W	[M]
R8211	ERJ2GEJ103X	10K 1/32W	[M]
R8221	ERJ2GEJ822X	8.2K 1/32W	[M]
R8225	ERJ2GEJ822X	8.2K 1/32W	[M]
R8230	ERJ2GEJ222X	2.2K 1/32W	[M]
R8231	ERJ2GEJ223X	22K 1/32W	[M]
R8232	ERJ2GEJ752X	7.5K 1/32W	[M]
R8251	ERJ6GEYJ6R8V	6.8 1/10W	[M]
R8261	ERJ2GEJ823X	82K 1/32W	[M]
R8262	ERJ2GEJ153X	15K 1/32W	[M]
R8263	ERJ2GEJ823X	82K 1/32W	[M]
R8264	ERJ2GEJ153X	15K 1/32W	[M]
R8311	ERJ2RHD242X	2.4K 1/32W	[M]
R8312	ERJ2RHD102X	1K 1/32W	[M]
R8313	ERJ2RHD123X	12K 1/32W	[M]
R8314	ERJ2GEJ183X	18K 1/32W	[M]
R8315	ERJ2GEJ240X	24 1/32W	[M]
R8316	ERJ2GEJ240X	24 1/32W	[M]
R8321	ERJ3RBD201V	200 3W	[M]
R8322	ERJ3GEY0R00V	0 1/16W	[M]
R8323	ERJ2GEJ330X	33 1/32W	[M]
R8324	ERJ2GEJ102X	1K 1/32W	[M]
R8325	ERJ3RBD201V	200 3W	[M]
R8326	ERJ3GEY0R00V	0 1/16W	[M]
R8327	ERJ2GEJ330X	33 1/32W	[M]
R8328	ERJ2GEJ102X	1K 1/32W	[M]
R8331	ERJ3RBD201V	200 3W	[M]
R8332	ERJ3GEY0R00V	0 1/16W	[M]
R8333	ERJ2GEJ330X	33 1/32W	[M]
R8334	ERJ2GEJ102X	1K 1/32W	[M]
R8335	ERJ3RBD201V	200 3W	[M]
R8336	ERJ2GEJ330X	33 1/32W	[M]
R8337	ERJ2GEJ102X	1K 1/32W	[M]
R8341	ERJ3RBD201V	200 3W	[M]
R8342	ERJ2GEJ330X	33 1/32W	[M]
R8343	ERJ2GEJ102X	1K 1/32W	[M]
R8401	ERJ2GEJ101X	100 1/32W	[M]
R8402	ERJ2GEJ100X	10 1/32W	[M]
R8420	ERJ2GEJ222X	2.2K 1/32W	[M]
R8421	ERJ2GE0R00X	0 1/32W	[M]
R8531	ERJ2GEJ152X	1.5K 1/32W	[M]
R8532	ERJ2GEJ222X	2.2K 1/32W	[M]
R8533	ERJ2GE0R00X	0 1/32W	[M]
R8541	ERJ2GEJ153X	15K 1/32W	[M]
R8551	ERJ2GE0R00X	0 1/32W	[M]
R8552	ERJ2GEJ102X	1K 1/32W	[M]
R8553	ERJ2GEJ102X	1K 1/32W	[M]
R8554	ERJ2GEJ680X	68 1/32W	[M]
R8555	ERJ2GEJ2R2X	2.2 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8556	ERJ3GEYJ560V	56 1/16W	[M]
R8557	ERJ3GEYJ510V	51 1/16W	[M]
R8558	ERJ2GEJ473X	47K 1/32W	[M]
R8559	ERJ2GEJ153X	15K 1/32W	[M]
R8561	ERJ2GE0R00X	0 1/32W	[M]
R8562	ERJ2GEJ102X	1K 1/32W	[M]
R8563	ERJ2GEJ102X	1K 1/32W	[M]
R8564	ERJ2GEJ220X	22 1/32W	[M]
R8565	ERJ2GEJ2R2X	2.2 1/32W	[M]
R8566	ERJ3GEYJ560V	56 1/16W	[M]
R8567	ERJ3GEYJ510V	51 1/16W	[M]
R8568	ERJ2GEJ473X	47K 1/32W	[M]
R8601	ERJ2GEJ104X	100K 1/32W	[M]
R8611	ERJ2GEJ101X	100 1/32W	[M]
R8613	ERJ2GEJ101X	100 1/32W	[M]
R8621	ERJ2GEJ105X	1M 1/32W	[M]
R8622	ERJ2RHD391X	390 1/32W	[M]
R8901	ERJ2GEJ470X	47 1/32W	[M]
R9001	ERJ2GEJ103X	10K 1/32W	[M]
R9002	ERJ2GEJ103X	10K 1/32W	[M]
R9003	ERJ2GEJ103X	10K 1/32W	[M]
R9004	ERJ2GEJ103X	10K 1/32W	[M]
R9005	ERJ2GEJ103X	10K 1/32W	[M]
R9007	ERJ2GEJ103X	10K 1/32W	[M]
R9010	ERJ2GE0R00X	0 1/32W	[M]
R9011	ERJ2GE0R00X	0 1/32W	[M]
R9012	ERJ2GE0R00X	0 1/32W	[M]
R9013	ERJ2GE0R00X	0 1/32W	[M]
R9014	ERJ2GE0R00X	0 1/32W	[M]
R9015	ERJ2GE0R00X	0 1/32W	[M]
R9016	ERJ2GE0R00X	0 1/32W	[M]
R9024	ERJ2GEJ103X	10K 1/32W	[M]
R9025	ERJ2GEJ103X	10K 1/32W	[M]
R9026	ERJ2GEJ103X	10K 1/32W	[M]
R9027	ERJ2GEJ103X	10K 1/32W	[M]
R9028	ERJ2GEJ103X	10K 1/32W	[M]
R9029	ERJ2GEJ103X	10K 1/32W	[M]
R9030	ERJ2GEJ104X	100K 1/32W	[M]
R9036	ERJ2GEJ103X	10K 1/32W	[M]
R9037	ERJ2GEJ103X	10K 1/32W	[M]
R9040	ERJ2GEJ103X	10K 1/32W	[M]
R9041	ERJ2GEJ103X	10K 1/32W	[M]
R9042	ERJ2GEJ103X	10K 1/32W	[M]
R9045	ERJ2GEJ103X	10K 1/32W	[M]
R9051	ERJ3GEY0R00V	0 1/16W	[M]
R9052	ERJ3GEY0R00V	0 1/16W	[M]
R9080	ERJ2GEJ103X	10K 1/32W	[M]
R9081	ERJ2GEJ103X	10K 1/32W	[M]
R9083	ERJ2GE0R00X	0 1/32W	[M]
R9085	ERJ2GEJ103X	10K 1/32W	[M]
R9086	ERJ2GE0R00X	0 1/32W	[M]
RX300	D1H83304A024	RESISTOR	[M]
RX301	D1H83304A024	RESISTOR	[M]
RX302	D1H83304A024	RESISTOR	[M]
RX303	D1H83304A024	RESISTOR	[M]
RX304	D1H83304A024	RESISTOR	[M]
RX305	D1H83304A024	RESISTOR	[M]
RX306	D1H83304A024	RESISTOR	[M]
RX307	D1H83304A024	RESISTOR	[M]
RX308	D1H83304A024	RESISTOR	[M]
RX309	D1H83304A024	RESISTOR	[M]
RX310	D1H83304A024	RESISTOR	[M]
RX1202	EXB2HV330JV	RESISTOR	[M]
RX1204	EXB2HV330JV	RESISTOR	[M]
RX1206	EXB2HV330JV	RESISTOR	[M]
RX1208	EXB2HV330JV	RESISTOR	[M]
RX1210	EXB2HV330JV	RESISTOR	[M]
RX1212	EXB2HV330JV	RESISTOR	[M]
RX1214	EXB2HV330JV	RESISTOR	[M]
RX1216	EXB2HV330JV	RESISTOR	[M]
RX1218	EXB2HV330JV	RESISTOR	[M]
RX1800	D1H83334A024	RESISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
RX1801	D1H447020001	RESISTOR	[M]
RX1802	D1H447020001	RESISTOR	[M]
RX1803	D1H84734A024	RESISTOR	[M]
RX3707	D1H84714A024	CHIP RESISTOR	[M]
RX3708	D1H84714A024	CHIP RESISTOR	[M]
RX3901	D1H410120001	CHIP RESISTOR	[M]
RX8001	D1H410320002	CHIP RESISTOR	[M]
RX8011	D1H88204A024	CHIP RESISTOR	[M]
RX8012	D1H88204A024	CHIP RESISTOR	[M]
RX8013	D1H88204A024	CHIP RESISTOR	[M]
RX8014	D1H88204A024	CHIP RESISTOR	[M]
RX8015	D1H88204A024	CHIP RESISTOR	[M]
RX8016	D1H88204A024	CHIP RESISTOR	[M]
RX8017	D1H88204A024	CHIP RESISTOR	[M]
RX8018	D1H422020001	CHIP RESISTOR	[M]
RX8019	D1H422020001	CHIP RESISTOR	[M]
RX8020	D1H422020001	CHIP RESISTOR	[M]
RX8031	D1H447220001	CHIP RESISTOR	[M]
RX8032	D1H447220001	CHIP RESISTOR	[M]
RX8111	D1H422320002	CHIP RESISTOR	[M]
RX8401	D1H410120001	CHIP RESISTOR	[M]
RX8402	D1H410120001	CHIP RESISTOR	[M]
RX8531	D1H456020001	CHIP RESISTOR	[M]
RX8532	D1H85604A024	CHIP RESISTOR	[M]
RX8533	D1H456020001	CHIP RESISTOR	[M]
RX8534	D1H456020001	CHIP RESISTOR	[M]
RX8611	D1H447220001	CHIP RESISTOR	[M]
RX8691	D1H410320002	CHIP RESISTOR	[M]
K1	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K5	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K501	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K505	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K510	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K518	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K519	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K520	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K533	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K534	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K536	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3901	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3902	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3903	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3906	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3921	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3922	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3923	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3924	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K3925	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K8105	ERJ3GEY0R00V	CHIP RESISTOR	[M]
K8251	ERJ3GEY0R00V	CHIP RESISTOR	[M]
W81	ERJ3GEY0R00V	CHIP RESISTOR	[M]
W82	ERJ3GEY0R00V	CHIP RESISTOR	[M]
W153	ERJ3GEY0R00V	CHIP RESISTOR	[M]
W154	ERJ3GEY0R00V	CHIP RESISTOR	[M]
W155	ERJ3GEY0R00V	CHIP RESISTOR	[M]
		CAPACITORS	
C1	ECJ1VB1H104K	0.1 50V	[M]
C2	ECJ1VB1H104K	0.1 50V	[M]
C3	ECJ1VB1H104K	0.1 50V	[M]
C4	ECJ1VB1H104K	0.1 50V	[M]
C5	ECJ1VB1H104K	0.1 50V	[M]
C6	F1H1H5R0A502	5P 50V	[M]
C7	F1H1H5R0A502	5P 50V	[M]
C9	ECJ1VB1H104K	0.1 50V	[M]
C10	ECJ1VB1H104K	0.1 50V	[M]
C11	F2A1A220A204	22 10V	[M]
C12	ECJ1VB1H104K	0.1 50V	[M]
C13	ECJ1VB1H104K	0.1 50V	[M]
C14	ECJ1VB1H104K	0.1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C15	F3F1A106A046	10 10V	[M]
C16	F2A1A220A204	22 10V	[M]
C17	ECJ1VB1H104K	0.1 50V	[M]
C18	ECJ1VB1H104K	0.1 50V	[M]
C19	ECJ1VB1H104K	0.1 50V	[M]
C20	ECJ1VB1H104K	0.1 50V	[M]
C21	ECJ1VB1H104K	0.1 50V	[M]
C22	ECJ1VB1H104K	0.1 50V	[M]
C27	F2A1A220A204	22 10V	[M]
C28	ECJ1VC1H390J	39P 50V	[M]
C37	F3F1A106A046	10 10V	[M]
C38	F3F1A106A046	10 10V	[M]
C42	ECJ1VB1H103K	0.01 50V	[M]
C101	ECJ1VB1H104K	0.1 50V	[M]
C102	ECJ1VB1H104K	0.1 50V	[M]
C103	ECJ1VB1H104K	0.1 50V	[M]
C104	ECJ1VB1H104K	0.1 50V	[M]
C105	ECJ1VB1H333K	0.033 50V	[M]
C106	ECJ1VB1H333K	0.033 50V	[M]
C107	ECJ1VB1H333K	0.033 50V	[M]
C108	ECJ1VB1H333K	0.033 50V	[M]
C109	ECJ1VB1H104K	0.1 50V	[M]
C110	ECJ1VB1H104K	0.1 50V	[M]
C111	ECJ1VB1H104K	0.1 50V	[M]
C112	ECJ1VB1H104K	0.1 50V	[M]
C113	ECJ1VB1H331K	330P 50V	[M]
C114	ECJ1VB1H331K	330P 50V	[M]
C115	ECJ1VB1H331K	330P 50V	[M]
C116	ECJ1VB1H331K	330P 50V	[M]
C117	F1J1V1050001	1 35V	[M]
C118	F1J1V1050001	1 35V	[M]
C119	F1J1V1050001	1 35V	[M]
C120	F1J1V1050001	1 35V	[M]
C121	F2A1V6810014	680 35V	[M]
C122	F2A1V6810014	680 35V	[M]
C123	ECQV1H474JL3	0.47 50V	[M]
C125	ECJ1VB1H104K	0.1 50V	[M]
C126	ECJ1VB1H104K	0.1 50V	[M]
C127	ECJ1VB1H103K	0.01 50V	[M]
C128	ECJ1VB1H103K	0.01 50V	[M]
C129	ECJ1VB1H102K	1000P 50V	[M]
C130	ECJ1VB1H102K	1000P 50V	[M]
C132	ECJ1VB1H104K	0.1 50V	[M]
C133	F2A1C2700003	27 16V	[M]
C134	F2A1C2700003	27 16V	[M]
C135	ECJ1VB1H104K	0.1 50V	[M]
C136	ECA1CAK100XB	10 16V	[M]
C137	ECJ1VB1C104K	0.1 16V	[M]
C138	ECJ1VB1C104K	0.1 16V	[M]
C143	ECA1HAK100XB	10 50V	[M]
C144	ECA0JAK221XB	220 6.3V	[M]
C145	ECA1HAK010XB	1 50V	[M]
C146	F2A1V220A184	22 35V	[M]
C147	ECJ1VB1H104K	0.1 50V	[M]
C148	ECA1HAK100XB	10 50V	[M]
C149	ECJ1VB1H102K	1000P 50V	[M]
C151	ECJ1VB1H104K	0.1 50V	[M]
C152	ECJ1VB1H104K	0.1 50V	[M]
C161	ECJ1VB1C104K	0.1 16V	[M]
C162	ECJ1VB1C104K	0.1 16V	[M]
C163	ECJ1VB1H103K	0.01 50V	[M]
C164	ECJ1VB1C104K	0.1 16V	[M]
C165	ECJ1VB1H104K	0.1 50V	[M]
C166	ECJ1VB1H103K	0.01 50V	[M]
C167	ECJ2YB0J106M	10 6.3V	[M]
C168	ECJ1VB1C104K	0.1 16V	[M]
C169	ECJ1VB1C104K	0.1 16V	[M]
C170	ECJ1VB1C104K	0.1 16V	[M]
C171	ECJ1VB1H104K	0.1 50V	[M]
C172	ECJ1VC1H470J	47P 50V	[M]
C173	ECJ1VC1H470J	47P 50V	[M]
C175	ECJ1VB1H102K	1000P 50V	[M]
C176	ECJ1VB1H102K	1000P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C177	ECJ1VB1H102K	1000P 50V	[M]
C178	ECJ1VB1H102K	1000P 50V	[M]
C179	ECJ1VB1H102K	1000P 50V	[M]
C180	ECJ1VB1H102K	1000P 50V	[M]
C181	ECJ1VB1H102K	1000P 50V	[M]
C182	ECJ1VB1H102K	1000P 50V	[M]
C183	ECJ1VB1H103K	0.01 50V	[M]
C185	ECJ1VB1H102K	1000P 50V	[M]
C201	ECJ1VB1H104K	0.1 50V	[M]
C202	ECJ1VB1H104K	0.1 50V	[M]
C203	ECJ1VB1H104K	0.1 50V	[M]
C204	ECJ1VB1H104K	0.1 50V	[M]
C205	ECJ1VB1H333K	0.033 50V	[M]
C206	ECJ1VB1H333K	0.033 50V	[M]
C207	ECJ1VB1H333K	0.033 50V	[M]
C208	ECJ1VB1H333K	0.033 50V	[M]
C209	ECJ1VB1H104K	0.1 50V	[M]
C210	ECJ1VB1H104K	0.1 50V	[M]
C211	ECJ1VB1H104K	0.1 50V	[M]
C212	ECJ1VB1H104K	0.1 50V	[M]
C213	ECJ1VB1H331K	330P 50V	[M]
C214	ECJ1VB1H331K	330P 50V	[M]
C215	ECJ1VB1H331K	330P 50V	[M]
C216	ECJ1VB1H331K	330P 50V	[M]
C217	F1J1V1050001	1 35V	[M]
C218	F1J1V1050001	1 35V	[M]
C219	F1J1V1050001	1 35V	[M]
C220	F1J1V1050001	1 35V	[M]
C221	F2A1V6810014	680 35V	[M]
C222	F2A1V6810014	680 35V	[M]
C223	ECQV1H474JL3	0.47 50V	[M]
C224	ECQV1H474JL3	0.47 50V	[M]
C225	ECJ1VB1H104K	0.1 50V	[M]
C226	ECJ1VB1H104K	0.1 50V	[M]
C227	ECJ1VB1H104K	0.1 50V	[M]
C228	ECJ1VB1H104K	0.1 50V	[M]
C229	ECJ1VB1H103K	0.01 50V	[M]
C230	ECJ1VB1H103K	0.01 50V	[M]
C231	ECJ1VB1H103K	0.01 50V	[M]
C232	ECJ1VB1H103K	0.01 50V	[M]
C233	ECJ1VB1H104K	0.1 50V	[M]
C234	F2A1C2700003	27 16V	[M]
C235	F2A1C2700003	27 16V	[M]
C236	ECJ1VB1H104K	0.1 50V	[M]
C237	ECA1CAK100XB	10 16V	[M]
C241	ECJ1VB1H104K	0.1 50V	[M]
C242	ECJ1VB1H104K	0.1 50V	[M]
C243	ECJ1VB1H104K	0.1 50V	[M]
C244	ECJ1VB1H104K	0.1 50V	[M]
C245	ECJ1VB1H333K	0.033 50V	[M]
C246	ECJ1VB1H333K	0.033 50V	[M]
C247	ECJ1VB1H333K	0.033 50V	[M]
C248	ECJ1VB1H333K	0.033 50V	[M]
C249	ECJ1VB1H104K	0.1 50V	[M]
C250	ECJ1VB1H104K	0.1 50V	[M]
C251	ECJ1VB1H104K	0.1 50V	[M]
C252	ECJ1VB1H104K	0.1 50V	[M]
C253	ECJ1VB1H331K	330P 50V	[M]
C254	ECJ1VB1H331K	330P 50V	[M]
C255	ECJ1VB1H331K	330P 50V	[M]
C256	ECJ1VB1H331K	330P 50V	[M]
C257	F1J1V1050001	1 35V	[M]
C258	F1J1V1050001	1 35V	[M]
C259	F1J1V1050001	1 35V	[M]
C260	F1J1V1050001	1 35V	[M]
C261	F2A1V6810014	680 35V	[M]
C262	F2A1V6810014	680 35V	[M]
C263	ECQV1H474JL3	0.47 50V	[M]
C264	ECQV1H474JL3	0.47 50V	[M]
C265	ECJ1VB1H104K	0.1 50V	[M]
C266	ECJ1VB1H104K	0.1 50V	[M]
C267	ECJ1VB1H104K	0.1 50V	[M]
C268	ECJ1VB1H104K	0.1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C269	ECJ1VB1H103K	0.01 50V	[M]
C270	ECJ1VB1H103K	0.01 50V	[M]
C271	ECJ1VB1H103K	0.01 50V	[M]
C272	ECJ1VB1H104K	0.1 50V	[M]
C273	F2A1C2700003	27 16V	[M]
C274	F2A1C2700003	27 16V	[M]
C275	ECJ1VB1H104K	0.1 50V	[M]
C276	ECA1CAK100XB	10 16V	[M]
C277	ECJ1VB1H103K	0.01 50V	[M]
C282	F1K2A474A006	0.47 100V	[M]
C283	F2A1V2220047	2200 35V	[M]
C284	ECJ1VB1H103K	0.01 50V	[M]
C285	ECJ1VB1H103K	0.01 50V	[M]
C286	ECJ1VB1H103K	0.01 50V	[M]
C287	ECJ1VB1H103K	0.01 50V	[M]
C288	ECJ1VB1H103K	0.01 50V	[M]
C289	ECJ1VB1H103K	0.01 50V	[M]
C290	ECJ1VB1H103K	0.01 50V	[M]
C300	ECJ1VB1H102K	1000P 50V	[M]
C301	ECJ1VB1H102K	1000P 50V	[M]
C302	ECJ1VB1H102K	1000P 50V	[M]
C303	ECJ1VB1H102K	1000P 50V	[M]
C305	ECJ1VB1H102K	1000P 50V	[M]
C306	ECJ1VB1H102K	1000P 50V	[M]
C307	ECJ1VB1H102K	1000P 50V	[M]
C308	ECJ1VB1H102K	1000P 50V	[M]
C309	ECJ2FB0J106K	10 6.3V	[M]
C310	ECJ2FB0J106K	10 6.3V	[M]
C311	ECJ2FB0J106K	10 6.3V	[M]
C312	ECJ2FB0J106K	10 6.3V	[M]
C314	ECJ1VB0J105K	1 6.3V	[M]
C315	ECJ1VB0J105K	1 6.3V	[M]
C316	ECJ1VB0J105K	1 6.3V	[M]
C317	ECJ1VB0J105K	1 6.3V	[M]
C319	ECJ1VB1C104K	0.1 16V	[M]
C320	ECJ2FB0J106K	10 6.3V	[M]
C321	ECJ1VB1C104K	0.1 16V	[M]
C322	ECJ2FB0J106K	10 6.3V	[M]
C323	ECJ1VB1C104K	0.1 16V	[M]
C324	ECJ2FB0J106K	10 6.3V	[M]
C325	ECJ1VB1C104K	0.1 16V	[M]
C326	ECJ2FB0J106K	10 6.3V	[M]
C327	ECJ1VC1H101J	100P 50V	[M]
C328	ECJ1VB1C104K	0.1 16V	[M]
C329	ECJ1VB1H103K	0.01 50V	[M]
C330	ECJ1VB1H103K	0.01 50V	[M]
C331	ECJ1VB1H103K	0.01 50V	[M]
C332	ECJ1VB1H103K	0.01 50V	[M]
C333	ECJ1VC1H471J	470P 50V	[M]
C334	ECJ2FB0J106K	10 6.3V	[M]
C335	ECJ2FB0J106K	10 6.3V	[M]
C336	ECJ2FB0J106K	10 6.3V	[M]
C337	ECJ2FB0J106K	10 6.3V	[M]
C338	ECJ1VC1H471J	470P 50V	[M]
C339	ECJ1VB1C104K	0.1 16V	[M]
C340	ECJ1VB1C104K	0.1 16V	[M]
C341	ECJ1VB1C104K	0.1 16V	[M]
C342	ECJ1VB1C104K	0.1 16V	[M]
C344	F2A1C2700003	27 16V	[M]
C345	ECJ1VC1H080D	8P 50V	[M]
C346	ECJ1VC1H080D	8P 50V	[M]
C347	ECJ1VB1C104K	0.1 16V	[M]
C348	ECJ1VB1C104K	0.1 16V	[M]
C349	ECJ1VB1C104K	0.1 16V	[M]
C350	ECJ1VB1C104K	0.1 16V	[M]
C351	ECJ1VB1C104K	0.1 16V	[M]
C352	ECJ1VB1C104K	0.1 16V	[M]
C353	ECJ1VB1C104K	0.1 16V	[M]
C354	ECJ1VB1C104K	0.1 16V	[M]
C355	ECJ1VB1C104K	0.1 16V	[M]
C356	ECJ1VB1C104K	0.1 16V	[M]
C357	ECJ1VB1H103K	0.01 50V	[M]
C358	ECJ1VB1C104K	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C359	ECJ1VB1C104K	0.1 16V	[M]
C360	ECJ1VB1C104K	0.1 16V	[M]
C361	ECJ1VB1C104K	0.1 16V	[M]
C362	ECJ1VB1C104K	0.1 16V	[M]
C363	ECJ1VB1C104K	0.1 16V	[M]
C364	ECJ1VB1C104K	0.1 16V	[M]
C365	ECJ1VB1C104K	0.1 16V	[M]
C367	ECJ1VB1C104K	0.1 16V	[M]
C368	ECJ1VB1C104K	0.1 16V	[M]
C369	ECJ1VB1C104K	0.1 16V	[M]
C371	ECJ1VB1C104K	0.1 16V	[M]
C372	ECJ1VB1C104K	0.1 16V	[M]
C373	ECJ1VB1C104K	0.1 16V	[M]
C374	ECJ1VB1C104K	0.1 16V	[M]
C375	ECJ1VB1C104K	0.1 16V	[M]
C376	ECJ1VB1C104K	0.1 16V	[M]
C377	ECJ1VB1C104K	0.1 16V	[M]
C378	ECJ1VB1C104K	0.1 16V	[M]
C379	ECJ1VB1C104K	0.1 16V	[M]
C380	ECJ1VB1C104K	0.1 16V	[M]
C381	ECJ1VB1C104K	0.1 16V	[M]
C382	ECJ1VB1C104K	0.1 16V	[M]
C383	ECJ1VB1C104K	0.1 16V	[M]
C384	ECJ1VB1C104K	0.1 16V	[M]
C385	ECJ1VB1C104K	0.1 16V	[M]
C386	ECJ1VB1C104K	0.1 16V	[M]
C387	ECJ1VC1H470J	47P 50V	[M]
C388	ECJ1VC1H470J	47P 50V	[M]
C389	ECJ1VB1H103K	0.01 50V	[M]
C390	ECJ1VB1H103K	0.01 50V	[M]
C393	ECA0JAK101XB	100 6.3V	[M]
C395	ECJ1VB1C104K	0.1 16V	[M]
C401	ECA0JAK101XB	100 6.3V	[M]
C404	ECJ1VB1H103K	0.01 50V	[M]
C405	ECJ1VB1C104K	0.1 16V	[M]
C406	F1L1C226A007	22 16V	[M]
C407	F1L1C226A007	22 16V	[M]
C408	ECJ1VB1C104K	0.1 16V	[M]
C409	ECJ1VC1H150J	15P 50V	[M]
C410	ECJ1VB1C104K	0.1 16V	[M]
C411	ECJ1VB1C104K	0.1 16V	[M]
C412	F2A1A2210089	220 10V	[M]
C413	ECJ2YB0J106M	10 6.3V	[M]
C416	ECJ1VB1C104K	0.1 16V	[M]
C424	ECA0JAK470XB	47 6.3V	[M]
C431	ECJ1VB1C104K	0.1 16V	[M]
C432	ECJ1VB1C104K	0.1 16V	[M]
C433	ECJ1VC1H100D	10P 50V	[M]
C434	ECJ1VC1H100D	10P 50V	[M]
C468	ECA0JAK101XB	100 6.3V	[M]
C499	ECJ1VB1H103K	0.01 50V	[M]
C500	ECJ1VB0J105K	1 6.3V	[M]
C501	ECJ1VB0J105K	1 6.3V	[M]
C502	ECJ1VB0J105K	1 6.3V	[M]
C503	ECJ1VB0J105K	1 6.3V	[M]
C504	ECJ1VB0J105K	1 6.3V	[M]
C505	ECJ1VB0J105K	1 6.3V	[M]
C506	ECJ1VB0J105K	1 6.3V	[M]
C507	ECJ1VC1H221J	220P 50V	[M]
C508	F2A0J1220028	1200 6.3V	[M]
C509	ECJ1VB1H472K	4700P 50V	[M]
C510	ECJ1VB1H472K	4700P 50V	[M]
C511	ECJ1VB1H472K	4700P 50V	[M]
C512	ECJ1VB1H472K	4700P 50V	[M]
C513	F2A0J470A245	47 6.3V	[M]
C514	F2A0J331A247	330 6.3V	[M]
C515	ECJ1VB1C104K	0.1 16V	[M]
C516	ECJ1VB1C104K	0.1 16V	[M]
C517	ECJ1VB1C104K	0.1 16V	[M]
C518	ECJ1VB1C104K	0.1 16V	[M]
C519	ECJ1VB1C104K	0.1 16V	[M]
C520	F2A0J470A245	47 6.3V	[M]
C521	ECJ1VB1C104K	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C522	ECJ1VB1C104K	0.1 16V	[M]
C523	ECJ1VC1H180J	18P 50V	[M]
C524	ECJ1VC1H180J	18P 50V	[M]
C525	ECJ1VC1H220J	22P 50V	[M]
C526	ECJ1VC1H220J	22P 50V	[M]
C527	ECJ1VB1C104K	0.1 16V	[M]
C528	ECJ1VB1C104K	0.1 16V	[M]
C529	ECJ1VB1C104K	0.1 16V	[M]
C530	ECJ1VB1C104K	0.1 16V	[M]
C531	ECJ1VB1C104K	0.1 16V	[M]
C532	F1J1A106A043	10 10V	[M]
C533	F1J1A106A043	10 10V	[M]
C534	ECJ1VB0J105K	1 6.3V	[M]
C535	ECJ1VB0J105K	1 6.3V	[M]
C536	ECJ1VC1H471J	470P 50V	[M]
C537	ECJ1VC1H471J	470P 50V	[M]
C538	ECJ1VC1H471J	470P 50V	[M]
C539	ECJ1VC1H471J	470P 50V	[M]
C540	ECJ1VB0J105K	1 6.3V	[M]
C541	ECJ1VB0J105K	1 6.3V	[M]
C542	ECJ1VC1H470J	47P 50V	[M]
C543	ECJ1VC1H470J	47P 50V	[M]
C544	ECJ1VC1H101J	100P 50V	[M]
C545	ECJ1VC1H101J	100P 50V	[M]
C546	ECJ1VC1H471J	470P 50V	[M]
C547	ECJ1VC1H471J	470P 50V	[M]
C550	ECJ1VC1H101J	100P 50V	[M]
C551	ECJ1VC1H101J	100P 50V	[M]
C552	ECJ1VC1H330J	33P 50V	[M]
C553	ECJ1VC1H330J	33P 50V	[M]
C554	ECJ1VB0J105K	1 6.3V	[M]
C555	ECJ1VB0J105K	1 6.3V	[M]
C556	ECJ1VB1C104K	0.1 16V	[M]
C557	ECJ1VB1C104K	0.1 16V	[M]
C558	ECA1CAK220XB	22 16V	[M]
C559	ERJ6GEY0R00V	0 1/16W	[M]
C560	ECA1HAK4R7XB	4.7 50V	[M]
C561	ECA1HAK4R7XB	4.7 50V	[M]
C562	ECJ1VC1H101J	100P 50V	[M]
C563	ECJ1VC1H101J	100P 50V	[M]
C564	ECJ1VC1H220J	22P 50V	[M]
C565	ECJ1VC1H220J	22P 50V	[M]
C568	ECJ1VB1H103K	0.01 50V	[M]
C569	ECJ1VB1H103K	0.01 50V	[M]
C572	ECJ1VB0J105K	1 6.3V	[M]
C573	ECJ1VB0J105K	1 6.3V	[M]
C574	ECJ1VB0J105K	1 6.3V	[M]
C575	ECJ1VB0J105K	1 6.3V	[M]
C576	ECJ1VC1H221J	220P 50V	[M]
C577	ECJ1VC1H221J	220P 50V	[M]
C580	ECJ1VB0J105K	1 6.3V	[M]
C581	ECJ1VB0J105K	1 6.3V	[M]
C582	ECJ1VB0J105K	1 6.3V	[M]
C583	ECJ1VB0J105K	1 6.3V	[M]
C584	ECJ1VC1H470J	47P 50V	[M]
C585	ECJ1VC1H470J	47P 50V	[M]
C586	F1J1A106A043	10 10V	[M]
C587	F1J1A106A043	10 10V	[M]
C588	ECJ1VB1C104K	0.1 16V	[M]
C589	ECJ1VB1C104K	0.1 16V	[M]
C590	ECJ1VB0J105K	1 6.3V	[M]
C591	ECJ1VB0J105K	1 6.3V	[M]
C592	ECJ1VB0J105K	1 6.3V	[M]
C593	ECJ1VB0J105K	1 6.3V	[M]
C594	F1J1A4750002	4.7 10V	[M]
C595	ECJ1VB1C104K	0.1 16V	[M]
C596	ECJ1VB1H103K	0.01 50V	[M]
C597	ECJ1VC1H101J	100P 50V	[M]
C598	ECJ1VB1H103K	0.01 50V	[M]
C599	ECJ1VB1A105K	1 10V	[M]
C600	ECJ1VB1C104K	0.1 16V	[M]
C601	ECA0JAK101XB	100 6.3V	[M]
C602	ECJ1VB0J105K	1 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C603	ECJ1VB0J105K	1 6.3V	[M]
C604	ECJ1VB0J105K	1 6.3V	[M]
C605	ECJ1VB0J105K	1 6.3V	[M]
C616	ECJ1VC1H220J	22P 50V	[M]
C617	ECJ1VC1H220J	22P 50V	[M]
C618	ECJ1VB0J105K	1 6.3V	[M]
C619	ECJ1VB1C104K	0.1 16V	[M]
C630	F2A0J470A245	47 6.3V	[M]
C631	ECJ1VB1C104K	0.1 16V	[M]
C632	ECJ1VB1H103K	0.01 50V	[M]
C633	F2A0J220A245	22 6.3V	[M]
C634	ECJ1VB0J105K	1 6.3V	[M]
C635	ECJ1VB0J105K	1 6.3V	[M]
C636	ECJ1VB0J105K	1 6.3V	[M]
C637	ECJ1VB0J105K	1 6.3V	[M]
C654	ECA0JAM102XB	1000 6.3V	[M]
C655	ECA0JAM102XB	1000 6.3V	[M]
C656	ECA0JAM102XB	1000 6.3V	[M]
C657	ECA0JAM102XB	1000 6.3V	[M]
C661	ECJ1VB1C104K	0.1 16V	[M]
C668	ECJ1VB1H102K	1000P 50V	[M]
C669	ECJ1VB1C104K	0.1 16V	[M]
C670	ECJ1VC1H221J	220P 50V	[M]
C671	ECJ1VC1H221J	220P 50V	[M]
C672	ECJ1VC1H221J	220P 50V	[M]
C673	ECJ1VC1H221J	220P 50V	[M]
C674	ECJ1VB1C104K	0.1 16V	[M]
C675	ECJ1VB1H392K	3900P 50V	[M]
C676	ECJ1VB1H392K	3900P 50V	[M]
C677	ECJ1VB1H472K	4700P 50V	[M]
C678	F1J1A106A043	10 10V	[M]
C679	F1J1A106A043	10 10V	[M]
C680	ECA0JAK101XB	100 6.3V	[M]
C681	ECJ1VB0J105K	1 6.3V	[M]
C684	ECJ1VB0J105K	1 6.3V	[M]
C685	ECJ2VB1H103K	0.01 50V	[M]
C687	ECA1CAK220XB	22 16V	[M]
C688	ECJ2VB1H103K	0.01 50V	[M]
C689	F2A0J1220028	1200 6.3V	[M]
C698	ERJ3GEY0R00V	0 1/16W	[M]
C701	F1BAF471A013	470P	[M] ⚠
C702	F1BAF471A013	470P	[M] ⚠
C703	ECQU2A104MLC	0.1	[M] ⚠
C704	ECQU2A104MLC	0.1	[M] ⚠
C705	F1BAF1020020	1000P	[M] ⚠
C706	F1BAF1020020	1000P	[M] ⚠
C707	F1BAF1020020	1000P	[M] ⚠
C709	F2B2E2200001	22 250V	[M]
C710	ECJ1VB1H104K	0.1 50V	[M]
C711	ECJ1VB1H102K	1000P 50V	[M]
C712	F2A1H1R0A234	1 50V	[M]
C713	ECQP6182JUB	0.0018 630V	[M]
C714	ECJ1VB1H104K	0.1 50V	[M]
C715	F2A0J1220028	1200 6.3V	[M]
C716	F2A1A1010102	100 10V	[M]
C717	ECJ1VB1C105K	1 16V	[M]
C718	ECJ1VB1C105K	1 16V	[M]
C719	ECJ1VB1H103K	0.01 50V	[M]
C720	ECJ1VC1H681J	680P 50V	[M]
C721	ECJ1VB1H102K	1000P 50V	[M]
C722	F2A1C101A236	100 16V	[M]
C723	ECJ1VB1H103K	0.01 50V	[M]
C724	ECJ1VB1H102K	1000P 50V	[M]
C725	ECA1CAK470XB	47 16V	[M]
C726	ECA1CAK100XB	10 16V	[M]
C727	F1H1E105A116	1 25V	[M]
C728	F1K1V105A003	1 35V	[M]
C729	F2A1E3310075	330 25V	[M]
C730	ECJ1VB1H222K	2200P 50V	[M]
C731	ECJ1VC1H681J	680P 50V	[M]
C732	ECJ1VB1C104K	0.1 16V	[M]
C733	F2A1C8210008	820 16V	[M]
C734	F1H1E105A116	1 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C735	F1H1E105A116	1 25V	[M]
C736	ECA1CAM221XB	220 16V	[M]
C737	ECA1CAM221XB	220 16V	[M]
C738	ECJ1VB1C104K	0.1 16V	[M]
C739	ECJ1VB1C104K	0.1 16V	[M]
C740	ECJ1VB1H102K	1000P 50V	[M]
C741	ECA1HAK4R7XB	4.7 50V	[M]
C742	ECJ1VC1H681J	680P 50V	[M]
C743	F2A1V2220047	2200 35V	[M]
C744	ECWF6103JL	0.01 630V	[M]
C745	F2A2D4710001	470 250V	[M]
C746	ECJ1VB1H221K	220P 50V	[M]
C747	ECJ1VB1H332K	3300P 50V	[M]
C748	F1BAF471A013	470P	[M] ⚠
C749	F2A1V220A184	22 35V	[M]
C750	ECJ1VC1H471J	470P 50V	[M]
C751	F2A1H1R0A234	1 50V	[M]
C752	ECJ1VB1H103K	0.01 50V	[M]
C753	ECJ1VB1C104K	0.1 16V	[M]
C754	ECQP6222JUB	0.0022 630V	[M]
C755	F1H1E105A116	1 25V	[M]
C756	F1H1E105A116	1 25V	[M]
C757	ECJ1VB1C104K	0.1 16V	[M]
C758	F2A1E2210050	220 25V	[M]
C759	F2A1E2210050	220 25V	[M]
C760	F2A0J222A247	2200 6.3V	[M]
C761	ECJ1VB1C104K	0.1 16V	[M]
C762	ECQV1H104JL3	0.1 50V	[M]
C763	F2A1H100A248	10 50V	[M]
C764	F2A1C221A243	220 16V	[M]
C767	F2A1C221A243	220 16V	[M]
C768	ECQB1H392KF3	3900P 50V	[M]
C769	F2A1V470A190	47 35V	[M]
C771	F1J2E1030004	0.01 250V	[M]
C773	F1K1V105A003	1 35V	[M]
C774	F1K1V105A003	1 35V	[M]
C775	F1H1E105A116	1 25V	[M]
C776	F1H1E105A116	1 25V	[M]
C778	F1J2E1030004	0.01 250V	[M]
C779	F2A1E2220034	2200 25V	[M]
C780	F2A1E3310075	330 25V	[M]
C781	F2A0J3310059	330 6.3V	[M]
C782	F2A0J1220028	1200 6.3V	[M]
C783	F2A1E3310075	330 25V	[M]
C784	F2A0J3310059	330 6.3V	[M]
C785	F2A0J1220028	1200 6.3V	[M]
C787	ECA1CAM221XB	220 16V	[M]
C788	ECA1CAM221XB	220 16V	[M]
C789	F2A0J3310059	330 6.3V	[M]
C790	F2A0J3310059	330 6.3V	[M]
C791	F2A0J3310059	330 6.3V	[M]
C792	F2A0J3310059	330 6.3V	[M]
C794	F2A0J3310059	330 6.3V	[M]
C795	ECA1CAM221XB	220 16V	[M]
C796	ECA1CAM221XB	220 16V	[M]
C797	ECJ1VB1H104K	0.1 50V	[M]
C798	ECJ1VB1C224K	0.22 16V	[M]
C799	F1H1E105A116	1 25V	[M]
C800	ECA1HAK220XB	22 50V	[M]
C801	ECA1HAK220XB	22 50V	[M]
C802	ECJ1VC1H101J	100P 50V	[M]
C803	ECJ1VC1H101J	100P 50V	[M]
C804	ECJ1VC1H101J	100P 50V	[M]
C805	ECJ1VC1H101J	100P 50V	[M]
C806	ECA1HAK3R3XB	3.3 50V	[M]
C807	ECJ1VB1H103K	0.01 50V	[M]
C808	ECA0JAK101XB	100 6.3V	[M]
C809	ECJ1VB1H103K	0.01 50V	[M]
C811	ECA0JAK470XB	47 6.3V	[M]
C812	ECJ1VB1H103K	0.01 50V	[M]
C814	ECJ1VB1H104K	0.1 50V	[M]
C815	ECJ1VC1H101J	100P 50V	[M]
C816	ECJ1VC1H101J	100P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C830	ECJ1VB1H104K	0.1 50V	[M]
C831	ECJ1VB1C473K	0.047 16V	[M]
C832	ECJ1VB1C473K	0.047 16V	[M]
C834	ECJ1VB1H104K	0.1 50V	[M]
C835	ECJ1VC1H221J	220P 50V	[M]
C836	ECJ1VC1H221J	220P 50V	[M]
C837	ECJ1VB1H104K	0.1 50V	[M]
C901	ECJ1VB0J105K	1 6.3V	[M]
C902	ECJ1VC1H470J	47P 50V	[M]
C904	ECJ1VB1C104K	0.1 16V	[M]
C905	ECJ1VC1H470J	47P 50V	[M]
C907	ECJ1VB1C104K	0.1 16V	[M]
C908	ECJ1VB0J105K	1 6.3V	[M]
C909	ECJ1VB0J105K	1 6.3V	[M]
C910	ECJ1VC1H470J	47P 50V	[M]
C912	ECJ1VB1C104K	0.1 16V	[M]
C913	ECJ1VC1H470J	47P 50V	[M]
C915	ECJ1VB1C104K	0.1 16V	[M]
C916	ECJ1VB0J105K	1 6.3V	[M]
C917	ECJ1VB0J105K	1 6.3V	[M]
C918	ECJ1VC1H470J	47P 50V	[M]
C920	ECJ1VB1C104K	0.1 16V	[M]
C921	ECJ1VC1H470J	47P 50V	[M]
C923	ECJ1VB1C104K	0.1 16V	[M]
C924	ECJ1VB0J105K	1 6.3V	[M]
C925	ECJ1VB0J105K	1 6.3V	[M]
C926	ECJ1VC1H470J	47P 50V	[M]
C928	ECJ1VB1C104K	0.1 16V	[M]
C929	ECJ1VC1H470J	47P 50V	[M]
C931	ECJ1VB1C104K	0.1 16V	[M]
C932	ECJ1VB0J105K	1 6.3V	[M]
C933	F1J1A4750002	4.7 10V	[M]
C934	F1J1A4750002	4.7 10V	[M]
C935	ECJ1VB1H472K	4700P 50V	[M]
C939	ECJ1VB0J474K	0.47 6.3V	[M]
C940	ECJ1VB0J474K	0.47 6.3V	[M]
C941	ECJ2YB1C474K	0.47 16V	[M]
C942	ECJ1VB0J474K	0.47 6.3V	[M]
C943	ECJ1VB1C104K	0.1 16V	[M]
C944	ECJ1VB1C104K	0.1 16V	[M]
C945	ECJ1VB1H102K	1000P 50V	[M]
C946	ECJ1VB1H102K	1000P 50V	[M]
C950	F2A0J1220028	1200 6.3V	[M]
C960	ECJ1VB1C104K	0.1 16V	[M]
C984	ECA1EAK100XE	10 25V	[M]
C1104	ECJ0EC1H120J	12P 50V	[M]
C1105	ECJ0EC1H120J	12P 50V	[M]
C1106	F1G1C104A104	0.1 16V	[M]
C1107	F1G1C104A104	0.1 16V	[M]
C1108	F1G1C104A104	0.1 16V	[M]
C1109	F1G1C104A104	0.1 16V	[M]
C1110	F1G1C104A104	0.1 16V	[M]
C1111	F1G1C104A104	0.1 16V	[M]
C1112	ECJ0EB1E102K	1000P 25V	[M]
C1113	F1G1C104A104	0.1 16V	[M]
C1114	F1G1C104A104	0.1 16V	[M]
C1115	F1G1C104A104	0.1 16V	[M]
C1116	F1G1C104A104	0.1 16V	[M]
C1117	F1G1C104A104	0.1 16V	[M]
C1118	F1G1C104A104	0.1 16V	[M]
C1119	F3G0J476A029	47 6.3V	[M]
C1120	F1G1C104A104	0.1 16V	[M]
C1121	F1G1C104A104	0.1 16V	[M]
C1122	F1G1C104A104	0.1 16V	[M]
C1132	F3F1A106A046	10 10V	[M]
C1133	F3F1A106A046	10 10V	[M]
C1134	ECJ2FB0J106K	10 6.3V	[M]
C1200	F1G1C104A104	0.1 16V	[M]
C1201	F1G1C104A104	0.1 16V	[M]
C1202	F1G1C104A104	0.1 16V	[M]
C1203	F1G1C104A104	0.1 16V	[M]
C1204	F1G1C104A104	0.1 16V	[M]
C1205	F1G1C104A104	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1206	F1G1C104A104	0.1 16V	[M]
C1207	F1G1C104A104	0.1 16V	[M]
C1208	F1G1C104A104	0.1 16V	[M]
C1209	F1G1C104A104	0.1 16V	[M]
C1210	F1G1C104A104	0.1 16V	[M]
C1211	F1G1C104A104	0.1 16V	[M]
C1212	F1G1C104A104	0.1 16V	[M]
C1213	F1G1C104A104	0.1 16V	[M]
C1214	F1G1C104A104	0.1 16V	[M]
C1215	F1G1C104A104	0.1 16V	[M]
C1216	F1G1C104A104	0.1 16V	[M]
C1217	F1G1C104A104	0.1 16V	[M]
C1218	F1G1C104A104	0.1 16V	[M]
C1219	F1G1C104A104	0.1 16V	[M]
C1220	F1G1C104A104	0.1 16V	[M]
C1221	ECJ0EC1H180J	18P 50V	[M]
C1222	ECJ0EC1H180J	18P 50V	[M]
C1223	F3G0J476A029	47 6.3V	[M]
C1224	F3G0J476A029	47 6.3V	[M]
C1235	ECJ0EB1E102K	1000P 25V	[M]
C1236	ECJ2FB0J106K	10 6.3V	[M]
C1237	ECJ2FB0J106K	10 6.3V	[M]
C1300	F1G1C104A104	0.1 16V	[M]
C1301	F1G1C104A104	0.1 16V	[M]
C1302	F1G1C104A104	0.1 16V	[M]
C1303	F1G1C104A104	0.1 16V	[M]
C1304	F1G1C104A104	0.1 16V	[M]
C1305	F1G1C104A104	0.1 16V	[M]
C1306	F1G1C104A104	0.1 16V	[M]
C1307	F1G1C104A104	0.1 16V	[M]
C1308	F1G1C104A104	0.1 16V	[M]
C1309	F1G1C104A104	0.1 16V	[M]
C1310	F1G1C104A104	0.1 16V	[M]
C1311	F1G1C104A104	0.1 16V	[M]
C1312	F1G1C104A104	0.1 16V	[M]
C1313	F1G1C104A104	0.1 16V	[M]
C1314	ECJ2FB0J106K	10 6.3V	[M]
C1315	ECJ2FB0J106K	10 6.3V	[M]
C1401	F1G1C104A104	0.1 16V	[M]
C1402	ECJ0EB1E102K	1000P 25V	[M]
C1407	ECJ2FB0J106K	10 6.3V	[M]
C1503	ECJ0EC1H220J	22P 50V	[M]
C1504	ECJ0EC1H220J	22P 50V	[M]
C1505	F1G1C104A104	0.1 16V	[M]
C1506	F1G1C104A104	0.1 16V	[M]
C1507	F1G1C104A104	0.1 16V	[M]
C1508	F1G1C104A104	0.1 16V	[M]
C1509	F1G1C104A104	0.1 16V	[M]
C1510	F1G1C104A104	0.1 16V	[M]
C1511	F1G1C104A104	0.1 16V	[M]
C1512	F1G1C104A104	0.1 16V	[M]
C1513	F1G1C104A104	0.1 16V	[M]
C1514	F1G1C104A104	0.1 16V	[M]
C1515	F1G1C104A104	0.1 16V	[M]
C1516	F1G1C104A104	0.1 16V	[M]
C1517	F1G1C104A104	0.1 16V	[M]
C1518	F1G1C104A104	0.1 16V	[M]
C1519	F1G1C104A104	0.1 16V	[M]
C1520	F1G1C104A104	0.1 16V	[M]
C1521	F1G1C104A104	0.1 16V	[M]
C1522	F1G1C104A104	0.1 16V	[M]
C1523	F1G1C104A104	0.1 16V	[M]
C1524	F1G1C104A104	0.1 16V	[M]
C1525	F1G1C104A104	0.1 16V	[M]
C1526	F1G1C104A104	0.1 16V	[M]
C1527	F1G1C104A104	0.1 16V	[M]
C1528	F1G1C104A104	0.1 16V	[M]
C1529	F1G1C104A104	0.1 16V	[M]
C1530	F1G1C104A104	0.1 16V	[M]
C1531	F1G1C104A104	0.1 16V	[M]
C1532	F1G1C104A104	0.1 16V	[M]
C1533	F1G1C104A104	0.1 16V	[M]
C1534	F1G1C104A104	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1535	F1G1C104A104	0.1 16V	[M]
C1536	F1G1C104A104	0.1 16V	[M]
C1540	ECJ0EB1E102K	1000P 25V	[M]
C1541	F3F1A106A046	10 10V	[M]
C1542	ECJ0EB1E102K	1000P 25V	[M]
C1543	ECJ0EB0J224K	0.22 6.3V	[M]
C1544	F1G1C104A104	0.1 16V	[M]
C1545	ECJ0EB1E102K	1000P 25V	[M]
C1546	F1G1C104A104	0.1 16V	[M]
C1547	ECJ2FB0J106K	10 6.3V	[M]
C1548	ECJ2FB0J106K	10 6.3V	[M]
C1630	F1H1E334A068	0.33 25V	[M]
C1631	F3E0J226A009	22 6.3V	[M]
C1632	F1G1C104A104	0.1 16V	[M]
C1702	F1G1C104A104	0.1 16V	[M]
C1703	F1G1C104A104	0.1 16V	[M]
C1704	F1G1C104A104	0.1 16V	[M]
C1705	F1G1C104A104	0.1 16V	[M]
C1706	F1G1C104A104	0.1 16V	[M]
C1707	F1G1C104A104	0.1 16V	[M]
C1708	F1G1C104A104	0.1 16V	[M]
C1709	F1G1C104A104	0.1 16V	[M]
C1710	F1G1C104A104	0.1 16V	[M]
C1711	F1G1C104A104	0.1 16V	[M]
C1712	F1G1C104A104	0.1 16V	[M]
C1713	ECJ2FB0J106K	10 6.3V	[M]
C1800	ECJ0EB1E102K	1000P 25V	[M]
C1801	F1G1C104A104	0.1 16V	[M]
C1802	F1G1C104A104	0.1 16V	[M]
C1803	F1G1C104A104	0.1 16V	[M]
C1804	F1G1C104A104	0.1 16V	[M]
C1805	F1G1C104A104	0.1 16V	[M]
C1806	F1G1C104A104	0.1 16V	[M]
C1807	F1G1C104A104	0.1 16V	[M]
C1808	F1G1C104A104	0.1 16V	[M]
C1809	F1G1C104A104	0.1 16V	[M]
C1810	F1G1C104A104	0.1 16V	[M]
C1811	F1G1C104A104	0.1 16V	[M]
C1812	F1G1C104A104	0.1 16V	[M]
C1813	F1G1C104A104	0.1 16V	[M]
C1814	F1G1C104A104	0.1 16V	[M]
C1817	F1G1C104A104	0.1 16V	[M]
C1818	F1G1C104A104	0.1 16V	[M]
C1819	ECJ0EB1E102K	1000P 25V	[M]
C1820	F1G1C104A104	0.1 16V	[M]
C1821	F1G1C104A104	0.1 16V	[M]
C1822	F1G1C104A104	0.1 16V	[M]
C1823	F1G1C104A104	0.1 16V	[M]
C1825	F1G1C104A104	0.1 16V	[M]
C1826	F1G1C104A104	0.1 16V	[M]
C1827	F3G0J476A029	47 6.3V	[M]
C1828	F3G0J476A029	47 6.3V	[M]
C1831	ECJ0EC1H150J	15P 50V	[M]
C1832	ECJ0EC1H150J	15P 50V	[M]
C1834	F3G0J476A029	47 6.3V	[M]
C1835	ECJ0EC1H050C	5P 50V	[M]
C1836	F1G1C104A104	0.1 16V	[M]
C1837	F1G1C104A104	0.1 16V	[M]
C1838	ECJ0EC1H100D	10P 50V	[M]
C1839	ECJ0EC1H100D	10P 50V	[M]
C1840	ECJ0EC1H100D	10P 50V	[M]
C1841	ECJ0EC1H100D	10P 50V	[M]
C1842	ECJ0EC1H100D	10P 50V	[M]
C1843	F3G0J476A029	47 6.3V	[M]
C1900	F1G1C104A104	0.1 16V	[M]
C1901	F1G1C104A104	0.1 16V	[M]
C1902	ECJ1VB1A474K	0.47 10V	[M]
C1903	F3F1A106A046	10 10V	[M]
C1904	F3F1A106A046	10 10V	[M]
C1905	F3F1A106A046	10 10V	[M]
C1906	F1G1C104A104	0.1 16V	[M]
C1907	F1G1C104A104	0.1 16V	[M]
C1908	F1G1C104A104	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1909	F3F1A106A046	10 10V	[M]
C1910	F3F1A106A046	10 10V	[M]
C1912	F3F1A106A046	10 10V	[M]
C1913	F1G1C104A104	0.1 16V	[M]
C1914	ECJ0EC1H220J	22P 50V	[M]
C1915	F1G1C104A104	0.1 16V	[M]
C1916	ECJ0EC1H220J	22P 50V	[M]
C1917	F1G1C104A104	0.1 16V	[M]
C1918	F1G1C104A104	0.1 16V	[M]
C1919	ECJ0EC1H270J	27P 50V	[M]
C1920	ECJ0EC1H270J	27P 50V	[M]
C1921	F1G1C104A104	0.1 16V	[M]
C1922	ECJ0EC1H270J	27P 50V	[M]
C1923	ECJ0EC1H270J	27P 50V	[M]
C1924	ECJ2FB0J106K	10 6.3V	[M]
C1925	ECJ0EC1H220J	22P 50V	[M]
C1930	F1G1C104A104	0.1 16V	[M]
C1936	EEEFK0J102P	1000 6.3V	[M]
C1937	EEEFK0J102P	1000 6.3V	[M]
C2001	ECJ1VB1H682K	6800P 50V	[M]
C2002	ECJ1VB1H682K	6800P 50V	[M]
C2004	ECJ1VB1E103K	0.01 25V	[M]
C2005	ECJ1VB1E223K	0.022 25V	[M]
C3001	ECJ0EB1E102K	1000P 25V	[M]
C3003	ECJ0EB1A104K	0.1 10V	[M]
C3004	ECJ0EB1A104K	0.1 10V	[M]
C3005	ECJ0EB1A104K	0.1 10V	[M]
C3006	ECJ0EB1A104K	0.1 10V	[M]
C3007	ECJ0EB1A104K	0.1 10V	[M]
C3008	ECJ0EB1A104K	0.1 10V	[M]
C3009	ECJ0EB1A104K	0.1 10V	[M]
C3010	ECJ0EB1A104K	0.1 10V	[M]
C3011	ECJ0EB1A104K	0.1 10V	[M]
C3012	ECJ0EB1A104K	0.1 10V	[M]
C3013	ECJ0EB1A104K	0.1 10V	[M]
C3014	ECJ0EB1A104K	0.1 10V	[M]
C3015	ECJ0EB1A104K	0.1 10V	[M]
C3016	ECJ0EB1A104K	0.1 10V	[M]
C3017	ECJ0EB1A104K	0.1 10V	[M]
C3018	ECJ0EB1A104K	0.1 10V	[M]
C3019	ECJ0EB1A104K	0.1 10V	[M]
C3020	ECJ0EB1A104K	0.1 10V	[M]
C3021	ECJ0EB1A104K	0.1 10V	[M]
C3111	EEE0JA470SR	47 6.3V	[M]
C3113	ECJ0EB1E102K	1000P 25V	[M]
C3201	EEE0GA331WP	330 4V	[M]
C3202	ECJ0EB1A104K	0.1 10V	[M]
C3203	ECJ0EB1A104K	0.1 10V	[M]
C3204	ECJ0EB1E821K	820P 25V	[M]
C3205	ECJ0EB1E392K	3900P 25V	[M]
C3206	ECJ1VB1C104K	0.1 16V	[M]
C3207	ECJ0EB1A104K	0.1 10V	[M]
C3208	ECJ1VB1C104K	0.1 16V	[M]
C3209	ECJ1VB0J105K	1 6.3V	[M]
C3210	ECJ0EB1A104K	0.1 10V	[M]
C3212	ECJ0EB1A104K	0.1 10V	[M]
C3216	ECJ0EB1A104K	0.1 10V	[M]
C3221	ECJ0EB1A104K	0.1 10V	[M]
C3231	ECJ0EB1A104K	0.1 10V	[M]
C3235	ECJ0EB1A104K	0.1 10V	[M]
C3239	ECJ0EB1A104K	0.1 10V	[M]
C3241	ECJ0EB1A104K	0.1 10V	[M]
C3242	ECJ0EB1A104K	0.1 10V	[M]
C3261	ECJ0EB1A104K	0.1 10V	[M]
C3271	ECJ0EB1A104K	0.1 10V	[M]
C3291	EEEFC0J101P	100 6.3V	[M]
C3292	ECJ1VB0J105K	1 6.3V	[M]
C3293	F2G0J470A031	47 6.3V	[M]
C3725	ECJ0EB1A104K	0.1 10V	[M]
C3901	EEE0GA331WP	330 4V	[M]
C3902	EEE0GA331WP	330 4V	[M]
C3904	EEE0GA331WP	330 4V	[M]
C3906	EEE0GA331WP	330 4V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C3907	ECJ0EB1A104K	0.1 10V	[M]
C3908	ECJ1VB0J105K	1 6.3V	[M]
C3909	ECJ0EB1A104K	0.1 10V	[M]
C3910	ECJ1VB0J105K	1 6.3V	[M]
C3911	ECJ0EB1A104K	0.1 10V	[M]
C3912	ECJ0EB1A104K	0.1 10V	[M]
C3913	ECJ1VB0J105K	1 6.3V	[M]
C3914	ECJ1VB0J105K	1 6.3V	[M]
C3915	ECJ0EB1A104K	0.1 10V	[M]
C3916	ECJ0EB1A104K	0.1 10V	[M]
C3917	ECJ1VB0J105K	1 6.3V	[M]
C3918	ECJ1VB0J105K	1 6.3V	[M]
C3919	ECJ0EB1A104K	0.1 10V	[M]
C3920	ECJ0EB1A104K	0.1 10V	[M]
C3921	ECJ1VB0J105K	1 6.3V	[M]
C3922	ECJ0EB1A104K	0.1 10V	[M]
C3923	ECJ0EB1A104K	0.1 10V	[M]
C3924	ECJ1VB0J105K	1 6.3V	[M]
C3926	ECJ1VB0J105K	1 6.3V	[M]
C3927	ECJ0EB1A104K	0.1 10V	[M]
C3928	ECJ1VB0J105K	1 6.3V	[M]
C3929	ECJ0EB1A104K	0.1 10V	[M]
C3930	ECJ0EB1A104K	0.1 10V	[M]
C3931	ECJ0EB1A104K	0.1 10V	[M]
C3933	ECJ0EB1A104K	0.1 10V	[M]
C3941	ECJ0EC1H221J	220P 50V	[M]
C3951	ECJ1VB1C104K	0.1 16V	[M]
C3954	ECJ1VB0J105K	1 6.3V	[M]
C3955	ECJ0EB1C103K	0.01 16V	[M]
C3956	EEE0JA330WR	33 6.3V	[M]
C8001	EEE0GA331WP	330 4V	[M]
C8002	F2G0J330A031	33 6.3V	[M]
C8003	ECJ0EF1C104Z	0.1 16V	[M]
C8004	ECJ0EF1C104Z	0.1 16V	[M]
C8005	ECJ0EF1C104Z	0.1 16V	[M]
C8006	ECJ0EF1C104Z	0.1 16V	[M]
C8007	ECJ0EF1C104Z	0.1 16V	[M]
C8011	F2G0J101A066	100 6.3V	[M]
C8012	ECJ0EF1C104Z	0.1 16V	[M]
C8013	ECJ0EF1C104Z	0.1 16V	[M]
C8014	ECJ0EF1C104Z	0.1 16V	[M]
C8015	ECJ0EF1C104Z	0.1 16V	[M]
C8016	ECJ0EF1C104Z	0.1 16V	[M]
C8018	ECJ0EF1C104Z	0.1 16V	[M]
C8020	ECJ0EF1C104Z	0.1 16V	[M]
C8021	ECJ0EF1C104Z	0.1 16V	[M]
C8022	ECJ0EF1C104Z	0.1 16V	[M]
C8023	ECJ0EF1C104Z	0.1 16V	[M]
C8026	ECJ0EF1C104Z	0.1 16V	[M]
C8051	ECJ1VB0J105K	1 6.3V	[M]
C8052	ECJ0EB1A104K	0.1 10V	[M]
C8053	ECJ0EF1C104Z	0.1 16V	[M]
C8054	ECJ0EC1H221J	220P 50V	[M]
C8055	ECJ1VB0J105K	1 6.3V	[M]
C8056	ECJ0EB1E222K	2200P 25V	[M]
C8057	ECJ1VB0J105K	1 6.3V	[M]
C8111	ECJ0EB1A104K	0.1 10V	[M]
C8112	ECJ1VB0J105K	1 6.3V	[M]
C8113	ECJ0EB1E471K	470P 25V	[M]
C8151	ECJ1VB0J475K	4.7 6.3V	[M]
C8152	ECJ1VB1C105K	1 16V	[M]
C8201	F2G0J101A066	100 6.3V	[M]
C8202	ECJ0EB1A104K	0.1 10V	[M]
C8203	ECJ0EB1A104K	0.1 10V	[M]
C8211	ECJ0EB1E122K	1200P 25V	[M]
C8221	ECJ0EB1E102K	1000P 25V	[M]
C8222	ECJ0EB1E821K	820P 25V	[M]
C8225	ECJ0EB1E102K	1000P 25V	[M]
C8226	ECJ0EB1E102K	1000P 25V	[M]
C8231	ECJ0EB1A104K	0.1 10V	[M]
C8232	ECJ0EB1A104K	0.1 10V	[M]
C8251	F2G0J221A065	220 6.3V	[M]
C8252	ECJ0EF1C104Z	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8253	ECJ0EF1C104Z	0.1 16V	[M]
C8255	F2G1C220A037	22 16V	[M]
C8256	ECJ0EF1C104Z	0.1 16V	[M]
C8257	F2G1C470A076	47 16V	[M]
C8258	ECJ0EF1C104Z	0.1 16V	[M]
C8261	ECJ0EF1C104Z	0.1 16V	[M]
C8262	ECJ0EF1C104Z	0.1 16V	[M]
C8301	F2G0J221A031	220 6.3V	[M]
C8302	F2G0J330A031	33 6.3V	[M]
C8303	ECJ0EB1A104K	0.1 10V	[M]
C8304	ECJ0EB1A104K	0.1 10V	[M]
C8305	ECJ0EB1A104K	0.1 10V	[M]
C8306	ECJ0EB1A104K	0.1 10V	[M]
C8311	ECJ0EB1A104K	0.1 10V	[M]
C8312	ECJ1VB0J105K	1 6.3V	[M]
C8313	ECJ1VB0J105K	1 6.3V	[M]
C8320	ECJ0EF1C104Z	0.1 16V	[M]
C8321	ECJ0EB1A104K	0.1 10V	[M]
C8325	ECJ0EB1A104K	0.1 10V	[M]
C8330	F2G0J470A031	47 6.3V	[M]
C8331	ECJ0EB1A104K	0.1 10V	[M]
C8335	ECJ0EB1A104K	0.1 10V	[M]
C8340	ECJ0EF1C104Z	0.1 16V	[M]
C8341	ECJ0EB1A104K	0.1 10V	[M]
C8401	ECJ0EC1H150J	15P 50V	[M]
C8421	F2G0J101A083	100 6.3V	[M]
C8422	ECJ0EF1C104Z	0.1 16V	[M]
C8423	F2G0J330A083	33 6.3V	[M]
C8424	ECJ0EF1C104Z	0.1 16V	[M]
C8426	ECJ0EF1C104Z	0.1 16V	[M]
C8427	ECJ0EF1C104Z	0.1 16V	[M]
C8428	ECJ0EF1C104Z	0.1 16V	[M]
C8429	ECJ0EF1C104Z	0.1 16V	[M]
C8501	F2G0J101A031	100 6.3V	[M]
C8502	ECJ0EF1C104Z	0.1 16V	[M]
C8503	ECJ0EF1C104Z	0.1 16V	[M]
C8504	ECJ0EF1C104Z	0.1 16V	[M]
C8505	ECJ0EF1C104Z	0.1 16V	[M]
C8506	ECJ0EF1C104Z	0.1 16V	[M]
C8511	ECJ1VB0J105K	1 6.3V	[M]
C8512	ECJ1VB0J105K	1 6.3V	[M]
C8513	ECJ0EB1A104K	0.1 10V	[M]
C8514	ECJ0EB1A104K	0.1 10V	[M]
C8515	ECJ0EB1A104K	0.1 10V	[M]
C8516	ECJ0EB1A104K	0.1 10V	[M]
C8521	ECJ0EB1A104K	0.1 10V	[M]
C8522	ECJ0EB1A104K	0.1 10V	[M]
C8523	ECJ0EF1C104Z	0.1 16V	[M]
C8524	ECJ0EF1C104Z	0.1 16V	[M]
C8525	ECJ0EB1C562K	5600P 16V	[M]
C8526	ECJ0EB1C183K	0.018 16V	[M]
C8527	ECJ0EB1A333K	0.033 10V	[M]
C8528	ECJ1VB0J105K	1 6.3V	[M]
C8529	ECJ1VB0J105K	1 6.3V	[M]
C8530	ECJ0EF1C104Z	0.1 16V	[M]
C8531	ECJ0EC1H101J	100P 50V	[M]
C8532	ECJ0EC1H221J	220P 50V	[M]
C8533	ECJ0EF1C104Z	0.1 16V	[M]
C8541	ECJ0EB1E472K	4700P 25V	[M]
C8550	F2G0J330A031	33 6.3V	[M]
C8551	ECJ0EF1C104Z	0.1 16V	[M]
C8552	F2G1C100A072	10 16V	[M]
C8553	F2G0J470A031	47 6.3V	[M]
C8554	ECJ1VB0J105K	1 6.3V	[M]
C8561	ECJ0EF1C104Z	0.1 16V	[M]
C8562	F2G1C100A072	10 16V	[M]
C8563	F2G0J470A031	47 6.3V	[M]
C8564	ECJ1VB0J105K	1 6.3V	[M]
C8571	ECJ3YB1A106M	10 10V	[M]
C8572	ECJ0EF1C104Z	0.1 16V	[M]
C8601	ECJ0EF1C104Z	0.1 16V	[M]
C8602	ECJ0EB1C153K	0.015 16V	[M]
C8603	ECJ0EB1C153K	0.015 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8606	ECJ0EF1C104Z	0.1 16V	[M]
C8611	ECJ0EF1C104Z	0.1 16V	[M]
C8621	ECJ0EC1H150J	15P 50V	[M]
C8622	ECJ0EC1H150J	15P 50V	[M]
C8651	ECJ0EF1C104Z	0.1 16V	[M]
C8652	ECJ0EF1C104Z	0.1 16V	[M]
C8701	ECJ0EB1A104K	0.1 10V	[M]
C8901	ECJ0EF1C104Z	0.1 16V	[M]
C8902	ECJ0EF1C104Z	0.1 16V	[M]
C9001	ECJ0EB1A104K	0.1 10V	[M]
C9002	ECJ0EF1C104Z	0.1 16V	[M]
C9003	ECJ0EF1C104Z	0.1 16V	[M]
C9006	ECJ0EB1A104K	0.1 10V	[M]
C9008	F2G0J470A031	47 6.3V	[M]
C9017	ECJ0EB1A104K	0.1 10V	[M]